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The Nature and Development of Religious Concepts in Children

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The Nature and Development of Religious Concepts in Children

A Dissertation
Presented to the School of Education
University of Southern California

In Partial Fulfillment
of the
Requirements for the
Degree of Doctor of Philosophy

By
ROY GEORGE BOSE
May, 1928

ACKNOWLEDGEMENTS

Grateful acknowledgement is hereby made to all who so generously contributed of their time and thought to this study. Thanks are due to the Ministers and Directors of Religious Education of the cooperating churches who so generously opened their churches, gave the tests and assisted in many other ways in making possible the completion of this study. No words of mine can adequately express my appreciation to the various members of the faculty of the University of Southern California for their guidance and constructive criticism. To Drs. A. S. Raubenheimer and F. C. Touton of the University of Southern California, I owe most, for they patiently and kindly guided my intellectual footsteps. For whatever is good in this study I give them credit, whatever is otherwise is mine.

Roy G. Bose

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THE NATURE AND DEVELOPMENT OF RELIGIOUS CONCEPTS IN CHILDREN

CHAPTER I

INTRODUCTION

Purpose of the Study. The purpose of this study is to attempt to discover the meanings that children associate with some concepts current in religious thinking and to measure the development in meaningfulness of these concepts with maturing youth. The recent popular discussions of religious questions and the controversies arising therefrom reveal a lack of clarity of thinking about the concepts which are basic in religion. In discussing religion, the religious teacher uses many general terms which have widely different meanings to different individuals. Such terms as God, Church, Salvation, etc., may have widely different associated meanings to the same person in various stages of experience and to different persons who have had dissimilar religious experiences. This is perhaps even more true with children, for whom concepts are changing constantly with enlarging experience. Just what does each term mean to the child who constantly hears it used? Our concern is not what such terms ought to mean to him, what we think they mean to him, or what we would like these terms to mean to the child; rather, the question is, what are the meanings actually associated with the more common religious concepts by children and what, if any, is the growth in meaningfulness with maturation? The influence of such factors as understanding of religious concepts by the Church School teachers, the length of time which the child has attended the Church School, the religious interest of the child as evidenced in church membership and family worship will be considered in relation to the understanding of religious concepts by the child. The nature of the growth of the concept, whether it be an increased understanding of the experiential terms, or the common terms of religious places and days, will be studied in this thesis.

Importance of Concepts. The child cannot bring the same experiences to the impressions received, as does the adult, and must interpret religious concepts and others in the light of the experiences which are his. Through the curriculum of the church school, the home influence, the church, and all the other experiences of a life, the child is constantly building meanings around various concepts. These meaning may be so vague, that no definite associations can be made, or they may be utterly wrong, as judged by the accepted authorities. They may also be confused, or they may possess the marks of fair understanding or of superior understanding. The reactions to the various concepts on the part of the child ought to reveal his experience in relation to those general ideas. It is, therefore, of highest importance to his religious development and to his general education as well to discover the meaningfulness of these general terms to the child.

Importance of Meaningful Concepts in Teaching. Good teaching would demand a common basis of understanding of the terms used in group discussion. Such a background of comprehension cannot be taken for granted. The child may be exposed to the same impressions as the adult, and yet be having vastly different experiences. That term which may be meaningful for the adult teacher, may be utterly meaningless or confused for the child. An instance of the childhood experience of Judd illustrates this condition. He writes:

> I remember the first time I heard the words "Ornith Ochyuchus Paradoxus." They were spoken by a teacher who knew what they meant, and his whole thought was doubtless off in Australia where there is an interesting animal bearing that name. What was my state of mind? The name had a rather impressive sound for me which I dare say my teacher was not noticing at all. I thought that name over as a kind of mouthfilling combination of rather melodious noises and nothing more. My teacher and I were in the presence of the same experience, so far as the immediately-given factors were concerned, but he had the meaning, and I had only the sound.[1]

The need of a common background of meaning is especially pertinent in the field of religious education where the various general terms are capable of a large number of meanings.

Importance of Concepts in Determining Human Behavior. Not only is it important to know the meanings associated by children with religious concepts in order that the child and the religious teacher may have a basis of common interpretation of religious experience, but also because in all phases of human behavior concepts influence the individual's actions. It is not the claim here that correctly-defined concepts will always issue in right action, but only that insofar as thinking is a factor in action, so religious thinking has its part in determining action. Our thinking is dependent upon our concepts, as they are the general terms which are necessary for reasoning. A vague concept means a poverty of experience or understanding, which would result in confused or wrong action. If the concept "service" means to the child, "to be waited upon," his attitude will be entirely different from the child

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[1] C. H. Judd, *Genetic Psychology for Teachers,* 47.

to whom "service" means "willing helpfulness." Betts[1] makes a contrast in this connection which points out the significance of right and wrong concepts. He says:

> If our concept of honesty is that "honesty is the best policy", if our concept of justice is, "an eye for an eye and a tooth for a tooth", if our concept of the church is that it is to serve as a safe haven for ransomed souls, if our concept of religion is that it is chiefly a set of forms, or a system of restraints, if our concept of God is that of a cruel, erratic and vengeful deity, endlessly punishing those who have misunderstood, or failed to accept a proffered salvation, then those false meanings are sure to govern our thinking and acting in relation to each of the things or persons involved.

Betts also goes on to show that different meanings associated with these same concepts would issue in different attitudes and actions.

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[1] G. H. Betts, *Methods in Teaching Religion*, 168.

CHAPTER II

DEVELOPMENT OF TEST MATERIALS AND METHOD

Review of Experimental Studies of the Nature of Concepts. What method is the best to employ in the attempt to reveal the meanings that children associate with concepts is the problem which now presents itself. This determination can best be made by an analysis of the methods previously used for discovering the nature of concepts in religion and other phases of human experiences. Perhaps the most outstanding and most suggestive study in a different field of experience, which has value in revealing technic helpful in studying concepts, is Meltzer's *'Children's Social Concepts,"* Columbia Contribution No. 192. In this study, the significant social concepts are studied. The concepts were selected by a ranking method from representative books and magazines which dealt with political, economic and social problems. The concepts of most frequent mention were chosen. A formula for weighing the number of times the concept is mentioned was evolved. Those concepts were then used in his study of children by a method of controlled interview. Each interviewer was trained in a definite procedure. The questions were of the type to secure from the children as nearly as possible the actual meaning associated with these concepts. Three hundred and thirty-three children of grades IV to XII were studied.

Several experimental studies in the field of religious concepts have previously been made. The most representative ones are here summarized briefly. It is not claimed that the studies discussed here represent all the work done on this phase of religious experience, but rather that they reveal the experimental technic so far developed in dealing with the problem with which this study is concerned. Representativeness rather than inclusiveness was the criterion considered in this connection. Earl Barnes[1] in the *"Pedagogical Seminary"* details an early experimental attempt to discover the meanings children attach to religious ideas. Nine concepts were chosen: 1, God; 2, Death; 3, Heaven; 4, Hell; 5, Angels; 6, Ghosts; 7, Witches; 8, Prayer; 9, Religious ceremonies. One thousand and ninety-one compositions were written by children from six to twenty years of age in the various schools of California on the subjects of heaven and hell. Sixteen reminiscences were prepared by adults, in which they tried to recall their early beliefs. Twenty-seven studies with young children were made by mothers and teachers through conversations. The composition method contains the weakness that the time needed for the test of any considerable number of concepts would be too

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[1] Earl Barnes, "Theological Life of a California Child." *The Pedagogical Seminary,* Vol. II, 1892-4, p. 442.

great for practicality. Also the lack of facility of expression of the real meanings attached by the child to the concepts. The questionnaire method of asking adults to recall childhood beliefs is so impossible of control, and so widely discredited, that it needs no discussion here. The conversation method, if properly controlled, has the values of quick and more detailed information. It would be interesting here if space permitted to note the contrast of concepts deemed most important by Barnes in 1892, as given above, and those chosen by Athearn in 1922, as reported later in this study.

James H. Leuba[1] reported in "*Religious Education*" (1917) the results of a research study into children's conceptions of God and religious education. Five groups of questions were submitted to the children of an elementary school of a small community. One hundred and seventy-five answers were received. The answers were written at length by the children. The five questions were:

Question I. Who is God? What kind of a being is He? Try to make a picture of Him, if you can. Cannot that be done? Could a person that could draw make a picture of God? Have you ever seen a picture of God? Describe God as you think He is.

Question II. Do you think of Him often? When? Why?

Question III. Where is He? Has He a home? What is it like?

Question IV. What does He do? Tell all the things you think He does. Has He ever done anything for you? Does He know and see you? If so, when?

Question V. Would it make much difference to you if there were no God? Would you get along as well without Him?

The method of lengthy and detailed description makes impossible the presentation of a large number of concepts. Only a small number of concepts can be tested by this descriptive method. The questions present the suggestions of a personal God, living somewhere and doing something. The child is asked to define what kind of a person God is, where He lives, and what He does. The questions, although limited and leading, have real value in that the meanings attached by the children to the concept of God are revealed in detail in the answers given. This experiment is one of the early attempts at discovering in a controlled way the meaning children associate with certain religious concepts.

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[1] J. H. Leuba, "Children's Conceptions of God and Religious Education." *Religious Education.* Vol. XII, 1917, p. 5.

Athearn[1] in the *"Indiana Survey of Religious Education,"* Vol. II, develops a type of multiple-choice test of religious ideal for the purpose of discovering what religious ideas individuals actually have.

Ten questions considered of fundamental importance in Protestantism were selected as representing the religious ideas necessary to children and youth. The questions were:

1. What is the purpose of the church?
2. Why should we study the Bible?
3. Why should we pray?
4. How do you think of Jesus?
5. How do you think of God?
6. How do you think of the Holy Spirit?
7. What does it mean to be a Christian?
8. How does one become a Christian?
9. What is sin?
10. What do you think happens after death?

A sample form of the test is here given:

WHY SHOULD WE STUDY THE BIBLE?

Put a cross in the square before each of the five best answers.

1. ( ) It answers the questions in the catechism.
2. ( ) It contains some of the world's best literature.
3. ( ) It gives the facts about the only true religion.
4. ( ) It helps people to find God.
5. ( ) It helps us in our daily living.
6. ( ) It shows how God has led men to have a better and better understanding of Him.
7. ( ) It strengthens our faith.
8. ( ) It teaches us to love and serve our fellow-men.
9. ( ) It tells about the early Christian church.
10. ( ) It tells about the life and teachings of Jesus.
11. ( ) It tells about the religious leaders of the Hebrews.
12. ( ) It tells how the wicked will be punished when they die.
13. ( ) It tells how the world was made.
14. ( ) It tells people in every age everything they ought to believe and everything they ought to do.
15. ( ) It was written down word for word just as God said it should be written.

As in the sample form reported above, fifteen answers were

[1] W. S. Athearn, *Indiana Survey of Religious Education*, II, 430-50.

given under each of the ten questions. Five of these were judged as good, five average, and five poor answers, as rated by a group of specialists in religion. The children were asked to select five out of the fifteen answers which they considered best answered the questions.

Two possible weaknesses might be noted in the above test. The first is, that it is a test made by adults from an adult viewpoint. The meanings are not those given by children, but rather made up by adults. The second possible weakness is the confusing number of answers. The difficulty of selecting five possible answers out of fifteen would seem too great a task for the average child in a limited time. In selecting the best answer, the child often does not express his own attitude, but what he thinks is wanted.

Tenny, in an unpublished thesis for the degree of Doctor of Philosophy at the University of California in 1926, analyzed some facts which condition the formation of religious and ethical ideas. The method employed in this research study offers the most directly applicable suggestions for this investigation. Some two hundred college students were studied by the use of an intelligence test, a general vocabulary test, a religious ethical vocabulary test, and a religious background questionnaire. The religious ethical test devised by Tenny is a well worked out scheme for both multiple choice and rating, and has a reliability coefficient of .81, which is accepted by statisticians as sufficiently reliable to be useful. One hundred religious ethical terms were used in the final form. The test is fitted for the college student and not useful for testing children, as the definitions are phrased in words beyond the range of the average high school student. The form of the test is an adaptation of the tests devised by Watson and Athearn. A sample form of one of the concepts is here given:

Adoration.

An attitude of deep admiration and awe, leading to reverence.

The aesthetic emotional state of one who is in the presence of God.

The attitude of any one in the presence of some beautiful object.

A religious experience which indicates joy in divine acceptance.

The subject was asked to check the definition he deemed the correct one.

This test has the advantage of only five possible respontses, which limits the range of choice and the possibility of confusion

in making judgments of values. Its weakness would seem to be in advanced phraseology and in the fact that it was made from dictionary definitions.

Several suggestions have come out of the study of the above investigations relative to the meanings that children attach to religious concepts. They are:

1. In order to get a representative picture of the child's religious thinking a large number of the most important religious concepts should be used. The field of religious experience should be covered.

2. A large group of children should be studied, to reduce the probability of error and to secure as complete a sampling as possible.

3. The method employed should be controlled so as to give reasonable certainty that the actual meanings children associate with these concepts are being secured. A minimum of suggestion and a maximum of free association, should be sought.

4. The method employed must be simple enough for the young child to comprehend and of equal value for use with children and the senior high school youth. Applications of the test at several stages of maturity should measure the development, if any, of understanding of concepts with maturing youth.

A group method which allows the largest sampling with the minimum of suggestion would seem best suited for the securing of reactions from a large group. The materials used must be valid in discovering the actual meanings associated in the mind of the child with the terms presented. The free-association method, of which the composition and descriptive answer methods are a part, permits of the minimum of suggestion. The multiple-choice test seems to be the most useful instrument used by the more recent investigators. It would seem that a test made up from the meanings derived from interviews or free-association tests previously given to small, but representative, groups of children would make an instrument which would reveal more readily, if not as accurately, the meanings larger groups attach to the concepts presented. Both the method of free-association and multiple-choice will be used in this study. The multiple-choice will be made from the meanings derived by the free-association method. The methods will be described at length in later chapters.

The Problem. While the emphasis of the preceding paragraphs has been on the method best adapted for the purpose of this study, it is well to state here that the method is incidental to

the main problem. The problem of this study in brief is to determine as accurately as possible the meanings which children actually associate with various religious concepts current in religious thinking. Three general questions should be considered in answering this problem:

1. What are the more important religious concepts current in religious thinking?

2. What meaning do the children assocaite with these religious concepts?

3. Is there a progressive development in meaningfulness of these religious concepts with maturing years and length of study in the church school?

Adequate answers to the above questions should furnish a picture of the religious thought life of children and give a background of fact for the evaluation of curricula and teaching methods in the church school. The method by which this study attempts to answer these questions will now be presented.

Method of Procedure. The first step in the development of this study was to secure a list of religious concepts which were representative of current religious thought. As the study is limited to children in the various evangelical denominations, religious magazines and books prominent in those circles were selected as a partial source of the concepts. The reason for the limitation of the study for the present to these groups will be discussed later under the test conditions. The books and magazines were used as supplementary material for check as to additional concepts not included in The International Grded Lessons[1] which were used as the main source for the religious concepts. The International Graded Lessons for the children from Junior Department through the Senior High Department of the church school were carefully examined and the concepts listed in order of frequency of mention. The following magazines were chosen—a representative of the major evangelical denominations and an undenominational magazine:

1. The Christian Century.
2. The California Christian Advocate.
3. The Christian Herald.

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[1] International Graded Lessons are published jointly by a number of evangelical denominations and are the materials used in the majority of the church schools.

4. The Congregationalist.
5. The Baptist.
6. The Churchman.

From each of these maagzines five books dealing with religious questions and which seemed to be most discussed were chosen. The indices of the 1926 volumes of the five magazines were carefully examined and the concepts used in the titles of various articles were listed. The indices of the twenty-five selected books were then examined for the concepts listed. This method has the merit of revealing what concepts are being discussed. The combined frequency of mention of the concepts in the International Graded Lessons, the magazines, and the books constituted the basis of the concept selection. The table showing the frequency of mention of these concepts is reported in the appendix.

One hundred and fourteen concepts were mentioned more than once. One hundred of these were selected on the basis of frquency of mention for the free association test which was the first form used in testing the children.

1. Sunday School. 2. Bible. 3. Repentance. 4. Old Testament. 5. Prophet. 6. Savior. 7. God. 8. Holy Spirit. 9. Christian. 10. Sin. 11. Angel. 12. Christ. 13. Salvation. 14. Charity. 15. New Testament. 16. Forgiveness. 17. Conversion. 18. Messiah. 19. Prayer. 20. Heaven. 21. Missions. 22. Kingdom of Heaven. 23. Fatherhood of God. 24. Prayer-meeting. 25. Passion. 26. Mercy. 27. Brotherhood of Man. 28. Sacrifice. 29. Duty. 30. Sacrament. 31. Hell. 32. Millenium. 33. Preacher. 34. Worship. 35. Son of God. 36. Service. 37. Omnipotence. 38. Resurrection. 39. Sacred. 40. Faith. 41. Easter. 42. Lord's Prayer. 43. Evolution. 44. Christmas. 45. Communion. 46. Sunday. 47. Lord. 48. Modernist. 49. Soul. 50. Lord's Supper. 51. Omniscience. 52. Miracle. 53. Revelation. 54. Fundamentalist. 55. Cross. 56. Pentecost. 57. Grace. 58. Trinity. 59. Supernatural. 60. Redemption. 61. Spiritual. 62. Love. 63. Word of God. 64. Disciple. 65. Catholic. 66. Baptism. 67. Eternity. 68. Higher Criticism. 69. Asceticism. 70. Gift of the Spirit. 71. Heathen. 72. Commandments. 73. Incarnation. 74. Scripture. 75. Sect. 76. Gospel. 77. Immortality. 78. Anti-Christ. 79. Atonement. 80. Will of God. 81. Protestant. 82. Religion. 83. Confession. 84. Worldliness. 85. Divine. 86. Atheism. 87. Benediction. 88. Bigotry. 89. Children of God. 90. Creed. 91. Mysticism. 92. Good Friday. 93. Regeneration. 94. Pacifist. 95. Sacrilege.

96. Infidel. 97. Conscience. 98. Church. 99. Temptation. 100. Righteousness.

After the free-association test had been given, a further limiting of the list of concepts was sought. The hundred concepts were rated as to importance for Juniors, Junior High School and Senior High School age pupils by twenty-two directors of Religious Education and religious workers. The method of rating is explained in detail in Chapter IV of this study.

The following sixty concepts were rated of most importance to religious experience of children by this group of trained religious workers:

1. Sunday School. 2. Bible. 3. Old Testament. 4. Savior. 5. God. 6. Christian. 7. Sin. 8. Christ. 9. Salvation. 10. Forgiveness. 11. Holy Spirit. 12. Conversion. 13. Prayer. 14. Repentance. 15. New Testament. 16. Missions. 17. Fatherhood of God. 18. Mercy. 19. Duty. 20. Preacher. 21. Sacrifice. 22. Lord's Supper. 23. Brotherhood of Man. 24. Worship. 25. Son of God. 26. Service. 27. Resurrection. 28. Sacred. 29. Faith. 30. Christmas. 31. Sunday. 32. Lord. 33. Soul. 34. Cross. 35. Lord's Supper. 36. Redemption. 37. Spiritual. 38. Easter. 39. Righteousness. 40. Love. 41. Disciple. 42. Baptism. 43. Gospel. 44. Commandments. 45. Eternity. 46. Word of God. 47. Confession. 48. Temptation. 49. Immortality. 50. Will of God. 51. Religion. 52. Children of God. 53. Scripture. 54. Divine. 55. Pacifist. 56. Conscience. 57. Creed. 58. Church. 59. Sacrilege. 60. Worldliness.

The foregoing list was later compared with the ten general concepts listed by Athearn[1] in Vol. II of the *Indiana Survey of Religious Education,* which is considered as representative of the religious ideas of Protestants. Athearn says, "As a check on the adequacy of the material brought together as the source for the religious ideas to be included in the test, the content of the compilation was compared with a list of the principal topics presented in systematic theology as given in the tables of contents of thirteen texts and found to be entirely satisfactory." The concepts used in this study were selected without reference to the list given by Athearn, and when compared with his list were found to group themselves under the ten concepts held to be inclusive by him and include concepts of service and righteousness. The concepts were found to group themselves under the ten concepts as follows:

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[1] W. S. Athearn, *Indiana Survey of Religious Education,* II, 440.

Sunday School	*Church*	*Bible*
Sunday School	Missions	Old Testament
	Preacher	New Testament
	Lord's Supper	Commandments
	Worship	Word of God
	Creed	Scriptures
	Baptism	Gospel
Prayer	*Jesus*	*God*
Prayer	Savior	Fatherhood of God
	Christ	Will of God
	Son of God	Children of God
	Lord	
	Lord's Prayer	
	Cross	
Holy Spirit	*Christian*	*Sin*
Holy Spirit	Salvation	Conscience
	Conversion	Forgiveness
	Faith	Repentance
	Brotherhood of Man	Temptation
	Duty	Worldliness
	Faith	
	Sacrifice	
Immortality	*Days and Seasons*	*Miscellaneous*
Resurrection	Christmas	Pacifist
Eternity	Easter	Righteousness
Soul	Sunday	Divine
Spiritual		Service
		Sacred
		Confession
		Religion
		Love

It is worthy of note that the above list includes all the concepts given by Athearn, and in addition gives a number of others. The general concepts dealing with religious experience as involved in the terms related to *Christian* and *Sin* have a large place in the total group. Emphasis is also given to the concepts *God, Jesus, Church, Bible,* and *Immortality*. The others are particular concepts and need no further amplification.

The list of one hundred religious concepts which were selected first were used in a free-association test which will be described in detail in Chapter III of this study. The test was given to four hundred and twenty-six children of ages ranging from eight to eighteen. The children were attendants at five different church schools in and about Los Angeles, and some few in the University High School at the University of Southern California. The procedure used in developing and administering this test is more fully

described in Chapter III of this study. Four hundred and twenty-six tests were given to the above groups, including a small group of church school teachers. Some of the papers showed that directions had not been followed and had to be discarded. Eliminating those over eighteen years of age, also, the final group which is reported in Chapter III was three hundred and forty-six in number.

The responses from the free-association tests were recorded on large work sheets, according to age and sex. The responses were then grouped as to related elements and narrowed to as small a group as consistently possible. The five responses of the highest frequency were chosen in most cases to make up a multiple-choice test which seemed to be best adapted for the desired end. The exceptions were made in cases where it seemed that the responses did not differentiate sufficiently to give an adequate range of meanings.

The multiple-choice test form was chosen for its adaptability, ease of administering and brevity. It made possible the testing of a large number of concepts in the space of fifteen minutes. The concepts used for the multiple-choice test were those rated as most important by a representative group of twenty-two directors of religious education and other religious workers. A complete form of the test is given in Chapter IV. The directions for administering the test were carefully worked out so as to make the conditions as uniformly favorable as possbile. Nineteen hundred and seventy-nine children in the church schools of Southern California were tested. The church schools ranged in size from one hundred to three thousand, and represented the major evangelical denominations. The results were carefully analyzed and are presented in Chapter IV of this study.

CHAPTER III

THE FREE-ASSOCIATION METHOD—DESCRIPTION AND RESULTS

It is the purpose of this chapter to review the reasons for choosing the free-association method as a means of discovering the meanings children associate with religious concepts and to state the results obtained by its use. The reader is referred to Warren's[1] *"History of Association Psychology"* for a comprehensive exposition and history of the method known as Free Association. Dr. Wyman[2] in an unpublished thesis on the *"Influence of Interest on Relative Success,"* presented in 1924 to Stanford University, gives a brief but representative review of the studies in the field of association testing.

The association method consists in obtaining responses to lists of stimulus words. The subject tested is asked to respond with the word or phrase associated with the stimulus word presented. Several variations of the method of stimulus response have been used. Both oral and written tests have been employed. Some investigators have sought only a single response, others a train of associations. The association tests have been used in various fields. They have been employed in detecting crime, in measuring interests, in various phases of psycho-analytical work, and as an instrument for measuring intelligence. In this study the method of association is used to derive the meanings associated with certain religious concepts.

If, as was discussed in the previous chapter, concepts are built up out of the complex experiences of life, a method which reveals with the minimum of suggestion the experiences associated with the concept would lend itself best as an instrument of measurement. The association method seems fitted to do this. Blouler[3] says, in an introductory chapter to Jung's study:

> I am most inclined to think and say those things which are colored in any way by some effect. In the activity of association there is mirrored the whole psychical processes which we have but to decipher to understand

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[1] H. C. Warren, *A History of Association Psychology.*
[2] J. D. Wyman, *Influence of Interest on Relative Success.*
[3] Jung, *Studies in Word Association,* ix.

> the complete man. Much is gained when the association is quite free, and directed thought is, as far as possible, excluded.

Woodworth and Wells[1] declare, regarding the free-association method, that,

> Few procedures in experimental psychology have so richly rewarded their investigators with the possibilities of practical application as this. In ordinary psychological nomenclature, it is the association experiment "par excellence."

Believing that the free-association method would give most nearly the actual meanings which children associate with certain religious concepts, it was employed in the first part of this experiment. It was felt that such a method excluded any directed suggestion and gave free opportunity for association response.

The question of whether only one meaning, the first meaning associated with the concept, should be sought, or a train of associated meanings, was carefully considered. Bleuler declares that,

> When a series of associations is demanded the subject is requested to produce all his associations without stopping; the intrusion of more or less conscious processes cannot, as a rule, be prevented. A mass of valueless co-ordinations and co-existences occur. It is, therefore, well to demand only one association to the given precept, and at the same time, to exclude the introduction of any direct thought by requesting as quick a reaction as possible.[2]

Sutherland,[3] however, reaches a different conclusion in which he contends that "The study of an association train is likely to be more important for practical purposes." Other methods might be productive of associative material valuable to the purpose of this study. However, the single or first response was the method decided upon after consideration of both phases. Those meanings which are most recent, most intense, or which reflect a mental set, will normally tend to be recalled first. If the most recent or

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[1] Woodworth and Wells, *Association Tests. Psychological Monographs*, 14.
[2] Jung, "The Association Method," *American Journal of Psychology*, 1910, 32.
[3] A. H. Sutherland, *Critique of Word Association Reactions.*

most intense meaning is given to the concept, the most vital and closely-associated meaning should be revealed. It was felt that a single vital response from many was better than a labored mass of responses from a few. Also, a large number of concepts could be presented in a limited time.

The group method of testing rather than the individual was used, because it made available a larger sampling. Every effort was made to avoid getting responses from only one group, sect or religious creed. A large grouping would tend to approach the normal in that it would tend to eliminate errors regarding accidents, illness, worry, excitement, cheating, learned responses or hostile attitude. Also, the group made possible a more free condition of responses. It should be mentioned here that the writer personally gave all the free-association tests to the groups reported here and sought to establish a uniform condition in all the situations.

As to the value of the group method as compared with the personal interview, as a means of deriving the actual meanings children associate with concepts, Shaffer[1] reports that in testing a large number of children by a group association method, he found that the group test brought out are much of actual meanings attached to the concept, as did the personal interview method used previously by Meltzer. Allport[2] reports in his study, "Influence of the Group Upon Association," that eighty-three per cent of the subjects produce more associations in the group than they produce alone.

Description of Test Used. A complete test in the form finally used is given here:

Name..... Age..... School Grade.....
Church School Department..... How many years have you gone to Sunday School? Do you attend Sunday School regularly, frequently, or seldom? .....

I am anxious to know what boys and girls understand by these religious words and phrases. Will you write down what each of these words means to you? Do not hesitate, but write the first meaning that comes to your mind. Try to write something after each word, but do not spend too much time on one

[1] L. Shaffer, "The Measurement of Children's Concepts," *Journal of Educational Psychology*, Jan. 1928, 41.

[2] F. Allport, "Influence of the Group Upon Association," *Journal of Experimental Psychology*, 159.

you do not understand. Wait until the signal is given before beginning. Do not look at your neighbor to see what he does. These samples will show you what is wanted.

1. BABY - - Little child.
2. FIBBING - - Lying.
3. CHEAT - -

Let us try the first one on the list. Begin.

1. Sunday School _____
2. Bible _____
3. Repentance _____
4. Old Testament _____
5. Prophet _____
6. Saviour _____
7. God _____
8. Holy Spirit _____
9. Christian _____
10. Sin _____
11. Angel _____
12. Christ _____
13. Salvation _____
14. Charity _____
15. New Testament _____
16. Forgiveness _____
17. Conversion _____
18. Messiah _____
19. Prayer _____
20. Heaven _____
21. Missions _____
22. Kingdom of Heaven _____
23. Fatherhood of God _____
24. Prayer-meeting _____
25. Passion _____
26. Mercy _____
27. Brotherhood of Man _____
28. Sacrifice _____
29. Duty _____
30. Sacrament _____
31. Hell _____
32. Millenium _____
33. Preacher _____
34. Worship _____
35. Son of God _____

36. Service
37. Omnipotence
38. Resurrection
39. Sacred
40. Faith
41. Easter
42. Lords Prayer
43. Evolution
44. Christmas
45. Communion
46. Sunday
47. Lord
48. Mndernist
49. Soul
50. Lords Supper
51. Omniscence
52. Miracle
53. Revelation
54. Cross
55. Fundamentalist
56. Pentecost
57. Grace
58. Trinity
59. Supernatural
60. Redemption
61. Spiritual
62. Love
63. Word of God
64. Disciple
65. Catholic
66. Baptism
67. Eternity
68. Higher Criticism
69. Asceticism
70. Gift of the Spirit
71. Heathen
72. Commanbments
73. Incarnation
74. Scriptures
75. Sect
76. Gospel
77. Immortality
78. Anti-Christ
79. Atonement

80. Will of God
81. Protestant
82. Religion
83. Confession
84. Worldliness
85. Divine
86. Atheism
87. Benediction
88. Bigotry
89. Children of God
90. Creed
91. Mysticism
92. Good Friday
93. Pacifist
94. Regeneration
95. Sacrilege
96. Infidel
97. Conscience
98. Church
99. Temptation
100. Righteousness

Preliminary tests were given to several small groups. Individuals were asked to indicate which words seemed to have "halo" effects which would suggest the associations of the words following. The order of the words was so fixed as to permit as little carry over as possible. One hundred concepts were chosen out of one hundred and fourteen for the test, as that group seemed to contain stimulus words which would call forth a representative picture of the religious understanding of the child. The test in its final form was given in five church schools and in the University High School of the University of Southern California. Four hundred and twenty-six pupils and teachers took the test. The tests were passed out by the teachers after the children had been instructed to leave them face down on their desks until told to begin. At first a rhythm was sought by timing each word, allowing thirty seconds for the younger children and twenty seconds for the older, but this was abandoned in favor of a game method. It was urged that the child see if he could not get the most meanings in the time allowed. When the child had written all he could, his paper

was taken up and time recorded. Time was allowed for all to complete their responses as far as they could do so. Speed on the entire test was sought rather than uniform length of time on each concept, as some concepts called forth more ready reactions than others.

Reliability of Test. In rating the meaning for a basis of correlation of scores, the definition given in the *Dictionary of Religion and Ethics* was used as the standard. For example, those meanings given by the children to the concept "God" which contained elements similar to the definition, "The Supreme Being, the highest object of worship, the creator and source of the existing universe, and the upholder of absolute justice," were rated highest. The response which most nearly approximated this standard was rated five, the next four, and so on to one, each response being considered independently. "No response" was rated one, or least, so as to have a rating for each concept. The rating was done by the writer, as it was felt that a more consistent scale would result from a single individual.

The scores of the odd numbered concepts, one hundred to seventy children, were totaled separately from the evens, and a correlation between these two halves of the test was made. The purpose of this correlation was to discover the consistency of response of the children tested. "The reliability of a test (or of any measuring instrument) is determined by the *consistency* with which it measures the capacity of those taking it."[1] By dividing the test into odds and evens, two tests of equal value are made. Hence, the consistency of performance throughout the test may be measured. Using the product-moment method of correlation, the coefficient of correlation secured for the above tests was .748 or .75, with a probable error of .02. When the Spearman or Brown "prophecy" formula was applied, the correlation was raised to .856 or .86. For a group of one hundred and seventy which was taken as a representative sampling the reliability coefficient is high. The nature of the test and the variability of the group condition the reliability. "To be a reliable measure of capacity, a mental or physical should—generally speaking, have a minimum reliability

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[1] H. E. Garrett, *Statistics in Psychology and Education*, 268.

coefficient of at least .80."[1] Thus, we can feel that the test is a reliable instrument for measuring the clarity of the concepts which it does measure.

The responses given for each concept by the children were recorded according to age and sex. These responses were then groupd by related elements and the following analysis made. Only the ten concepts which were rated of highest importance by the group of twenty-two religious workers are reported here, because of limited space and fear of possible confusion. The tables for the remainder of the one hundred concepts are included in the appendix.

Presentation and Interpretation of Tables. The first ten tables given below should be read as follows:

A. Each table represents a single concept. Under each concept is given the various meanings associated with it by the children, as reported in the free-association test and also the no response and miscellaneous. By miscellaneous is meant those meanings which occurred at most but twice, and had no common elements with others by which they might be related. To the left of the concept is the rating as derived from the deviation from the definition as given in the *Dictionary of Religion and Ethics*. Five is the highest rating, showing the superior answers or meanings judged most nearly resembling the definition; four next, or the fair understanding; three next, or the confused answer; two next, or the obviously wrong idea; and one, or no response. To the right of the concept are the percentages of the frequency of occurrence of the various meanings. The division of the total into age groups to correspond with the accepted Church School divisions is done to show the difference and similarities in the groups, and the development, if any.

B. This table refers to the concept above it and is a classification according to the author's interpretation of the data there presented. The percentage of each group age found in each classification is shown.

Interpretation of Percentage Tables. The ten tables show-

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[1] H. E. Garrett, *op. cit.*, 269.

ing the analyzed meanings of the separate concepts and also the other ninety reported in the Appendix[1] should be read as follows:

The concept 'God" will be used to illustrate the method of analysis. Twelve different meanings were given for the concept "God." These represent in some cases the combination of several responses into a single meaning which seems to express the essential elements of those responses. The rating is only for the convenience of classification. Importance should rather be attached to the meanings associated. For the concept "God" a variety of meanings are found, with the major response corresponding most nearly to the definition as given in the *Dictionary of Religion and Ethics*. It appears that the child is fairly well acquainted with the concept of "God." The table also reveals a small but definite development in meaning with maturation, with a lessening of no response, wrong idea and confused answer, and an increase of fair understanding and superior answer.

This table, as well as the others, is most useful for the purpose of seeing the responses made by the three hundred and forty-six children and to note the types of response, and the development in understanding. Further analysis by means of other tables will be made later.

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[1] The remaining tables together with other supplementary materials are to be found in the typewritten copies in the Library of the University of Southern California.

TABLE 1, A.

SHOWING THE MEANINGS ATTACHED TO THE CONCEPT "GOD" BY THE THREE HUNDRED AND FORTY-SIX CHILDREN AND THE PERCENTAGE OF EACH AGE GROUP GIVING THE SEVERAL RATED RESPONSES.

Rating	"GOD"	Age Group 8-12 yrs. %	Age Group 13-15 yrs. %	Age Group 16-18 yrs. %	Composite of all ages %
5	The Almighty or Supreme Being	3.9	13.7	33.3	12.4
5	Father or Heavenly Father	37.0	29.1	23.2	32.1
5	The Creator	3.9	8.3	5.8	5.5
5	One Whom we Worship	5.0	8.3	7.2	6.4
4	Savior	11.6	9.4	0.0	8.7
4	Highest Ideal	1.0	2.0	13.0	3.8
4	Guide or Protector	1.1	2.0	2.9	1.7
3	Spirit or Holy Spirit	11.0	4.2	7.2	8.4
3	Jesus Christ	5.5	8.3	4.1	6.1
2	Good or Holy Man	7.2	3.1	0.0	4.6
2	Miscellaneous	2.2	2.0	1.4	2.0
1	No response	10.5	9.4	1.4	8.4

TABLE 1, B.

SHOWING THE PERCENTAGE OF EACH AGE GROUP GIVING RESPONSES OF EACH OF THE SEVERAL DEGREES OF UNDERSTANDING OF THE CONCEPT "GOD".

		As above %	As above %	As above %	As above %
1	No response	10.5	9.4	1.4	8.4
2	Wrong Idea	9.4	5.1	1.4	6.6
3	Confused Answer	16.5	12.5	11.5	14.5
4	Fair Understanding	13.7	13.4	15.9	14.2
5	Superior Answer	49.8	59.4	69.5	56.4

TABLE 2, A.

SHOWING THE MEANINGS ATTACHED TO THE CONCEPT "SUNDAY SCHOOL" BY THE THREE HUNDRED AND FORTY-SIX CHILDREN AND THE PERCENTAGE OF EACH AGE GROUP GIVING THE SEVERAL RATED RESPONSES.

Rating	"SUNDAY SCHOOL"	Age Group 8-12 yrs. %	Age Group 13-15 yrs. %	Age Group 16-18 yrs. %	Composite of all ages %
5	Place of Religious Instruction	6.1	7.4	48.8	14.7
4	Study the Bible	5.0	17.0	23.6	11.8
4	Religious School	7.3	8.5	6.8	7.8
4	Learn to Do Right	8.4	2.1	1.9	5.2
4	Place to Worship	10.1	13.8	6.9	10.1
4	Learn About God and Jesus	29.6	29.8	10.3	25.4
3	Church or God's House	22.3	14.9	1.6	15.9
1	No Response	11.2	6.4	0.0	7.5

TABLE 2, B.

SHOWING THE PERCENTAGE OF EACH AGE GROUP GIVING RESPONSES OF EACH OF THE SEVERAL DEGREES OF UNDERSTANDING OF THE CONCEPT "SUNDAY SCHOOL".

		As above %	As above %	As above %	As above %
1	No Response	11.2	6.4	0.0	7.5
2	Wrong Idea	0.0	0.0	0.0	0.0
3	Confused Answer	22.3	14.9	1.6	15.9
4	Fair Understanding	60.4	71.2	49.5	60.8
5	Superior Answer	6.1	7.4	48.8	15.7

TABLE 3, A.

SHOWING THE MEANINGS ATTACHED TO THE CONCEPT "BIBLE" BY THE THREE HUNDRED AND FORTY-SIX CHILDREN AND THE PERCENTAGE OF EACH AGE GROUP GIVING THE SEVERAL RATED RESPONSES.

Rating	"BIBLE"	Age Group 8-12 yrs. %	Age Group 13-15 yrs. %	Age Group 16-18 yrs. %	Composite of all ages %
5	Guide Book of Christian Living..	7.7	11.5	15.9	10.4
4	History of Biblical Days.....	4.4	7.3	14.5	7.2
4	God's Word	9.9	16.7	11.6	12.1
4	Book about Jesus	13.3	8.3	7.2	10.7
3	Book about God	22.7	22.9	13.1	20.8
4	Holy Book	27.6	22.9	18.9	24.6
3	Miscellaneous	1.7	4.2	8.7	3.8
1	No Response	12.7	6.3	10.1	10.7

TABLE 3, B.

SHOWING THE PERCENTAGE OF EACH AGE GROUP GIVING RESPONSES OF EACH OF THE SEVERAL DEGREES OF UNDERSTANDING OF THE CONCEPT "BIBLE'.

		As above %	As above %	As above %	As above %
1	No Response	12.7	6.3	10.1	10.7
2	Wrong Idea	0.0	0.0	0.0	0.0
3	Confused Answer	37.7	35.4	24.6	32.5
4	Fair Understanding	41.9	46.9	49.4	46 4
5	Superior Answer	7.7	11.5	15.9	10.4

TABLE 4, A.

SHOWING THE MEANINGS ATTACHED TO THE CONCEPT "HOLY SPIRIT" BY THE THREE HUNDRED AND FORTY-SIX CHILDREN AND THE PERCENTAGE OF EACH AGE GROUP GIVING THE SEVERAL RATED RESPONSES.

Rating	"HOLY SPIRIT"	Age Group 8-12 yrs. %	Age Group 13-15 yrs. %	Age Group 16-18 yrs. %	Composite of all ages %
5	God or Spirit of God	24.9	29.1	26.1	26.3
5	Third of Triune	0.0	0.0	0.0	0.0
4	Jesus or Spirit of Jesus	14.4	13.5	14.5	14.2
4	Spirit of Holiness	2.2	4.2	17.4	3.8
4	To do the Right Thing.....	7.7	6.3	5.8	6.9
4	Holy Things	1.7	0.0	0.0	0.9
4	Religious Feeling	2.2	3.1	1.4	2.3
3	Ghost or Holy Ghost.....	0.6	2.0	2.9	1.4
2	An Angel	1.1	1.0	1.4	1.2
2	Miscellaneous	7.2	4.2	7.2	6.4
1	No Response	37.6	32.2	23.2	33.3

TABLE 4, B.

SHOWING THE PERCENTAGE OF EACH AGE GROUP GIVING RESPONSES OF EACH OF THE SEVERAL DEGREES OF UNDERSTANDING OF THE CONCEPT "HOLY SPIRIT".

		As above %	As above %	As above %	As above %
1	No Response	37.6	32.2	23.2	33.3
2	Wrong Idea	8.3	5.2	8.6	7.4
3	Confused Answer	0.6	2.0	2.9	1.5
4	Fair Understanding	28.2	27.1	39.1	31.5
5	Superior Answer	25.5	33.3	26.1	26.3

TABLE 5, A.

SHOWING THE MEANINGS ATTACHED TO THE CONCEPT "CHRISTIAN" BY THE THREE HUNDRED AND FORTY-SIX CHILDREN AND THE PERCENTAGE OF EACH AGE GROUP GIVING THE SEVERAL RATED RESPONSES

Rating	"CHRISTIAN"	Age Group 8-12 yrs. %	Age Group 13-15 yrs. %	Age Group 16-18 yrs. %	Composite of all ages %
5	Believer in Christ	15.5	20.8	28.9	19.7
4	Believer in God	27.1	36.5	33.3	30.9
4	A Church Member	0.6	3.1	2.9	1.7
4	Believer in Bible	0.6	1.0	2.9	1.2
4	To be a Christian	3.2	5.2	1.4	3.5
4	Be Saved	1.7	0.0	2.9	1.4
3	Attends Sunday School and Church	6.1	2.0	0.0	3.8
3	A Good Person	10.5	8.3	5.8	9.0
3	Type of Religion	1.7	3.1	7.2	3.2
2	Miscellaneous	7.7	4.2	4.3	6.1
1	No Response	24.3	15.6	10.0	19.1

TABLE 5, B.

SHOWING THE PERCENTAGE OF EACH AGE GROUP GIVING RESPONSES OF EACH OF THE SEVERAL DEGREES OF UNDERSTANDING OF THE CONCEPT "CHRISTIAN".

		As above %	As above %	As above %	As above %
1	No Response	24.3	15.6	10.0	19.1
2	Wrong Idea	8.8	4.2	4.3	6.7
3	Confused Answer	18.3	13.4	13.0	16.0
4	Fair Understanding	33.2	45.8	43.6	38.7
5	Superior Answer	15.5	20.8	28.9	19.7

TABLE 6, A.

SHOWING THE MEANINGS ATTACHED TO THE CONCEPT "SIN" BY THE THREE HUNDRED AND FORTY-SIX CHILDREN AND THE PERCENTAGE OF EACH AGE GROUP GIVING THE SEVERAL RATED RESPONSES.

Rating	"SIN"	Age Group 8-12 yrs. %	Age Group 13-15 yrs. %	Age Group 16-18 yrs. %	Composite of all ages %
5	Disobeying God	6.6	12.5	5.8	8.1
5	Against Will of Christ	1.1	3.1	0.0	1.4
4	Breaking Commandments	0.0	3.1	8.7	2.6
4	Doing Wrong	36.5	51.0	56.7	44.5
3	Bad or Evil	23.2	8.3	11.6	16.8
3	Lying, etc.	5.0	4.2	0.0	3.8
2	Miscellaneous	6.6	4.2	13.0	7.2
1	No response	21.0	13.5	4.5	15.6

TABLE 6, B.

SHOWING THE PERCENTAGE OF EACH AGE GROUP GIVING RESPONSES OF EACH OF THE SEVERAL DEGREES OF UNDERSTANDING O FTHE CONCEPT "SIN".

		As above %	As above %	As above %	As above %
1	No Response	21.0	13.5	4.3	15.6
2	Wrong Idea	6.6	4.2	13.0	7.2
3	Confused Answer	28.2	12.5	11.6	20.6
4	Fair Understanding	36.5	54.1	65.4	47.1
5	Superior Answer	7.7	15.6	5.8	9.5

TABLE 7, A.

SHOWING THE MEANINGS ATTACHED TO THE CONCEPT "CHRIST" BY THE THREE HUNDRED AND FORTY-SIX CHILDREN AND THE PERCENTAGE OF EACH AGE GROUP GIVING THE SEVERAL RATED RESPONSES.

Rating	"CHRIST"	Age Group 8-12 yrs. %	Age Group 13-15 yrs. %	Age Group 16-18 yrs. %	Composite of all ages %
5	Superior Answer	16.7	8.3	1.4	11.3
4	Savior	23.2	22.8	15.9	21.7
4	Son of God	15.5	24.0	52.0	25.1
4	The Lord	7.7	4.2	2.9	5.8
3	God	7.7	7.3	7.2	7.5
3	Our Father	1.7	0.0	0.0	0.9
3	Holy Spirit	1.1	1.0	1.4	1.2
2	Good Man	2.7	3.1	4.3	3.2
2	Miscellaneous	4.4	8.3	5.8	5.8
1	No Response	19.3	20.8	8.8	17.6

TABLE 7, B.

SHOWING THE PERCENTAGE OF EACH AGE GROUP GIVING RESPONSES OF EACH OF THE SEVERAL DEGREES OF UNDERSTANDING OF THE CONCEPT "CHRIST".

		As above %	As above %	As above %	As above %
1	No Response	19.3	20.8	8.8	17.6
2	Wrong Idea	7.1	11.4	10.1	9.0
3	Confused Answer	10.5	8.3	8.6	9.6
4	Fair Understanding	46.4	51.0	70.8	52.6
5	Superior Answer	16.7	8.3	1.4	11.3

TABLE 8, A.

SHOWING THE MEANINGS ATTACHED TO THE CONCEPT "PRAYER" BY THE THREE HUNDRED AND FORTY-SIX CHILDREN AND THE PERCENTAGE OF EACH AGE GROUP GIVING THE SEVERAL RATED RESPONSES.

Rating	"PRAYER"	Age Group 8-12 yrs. %	Age Group 13-15 yrs. %	Age Group 16-18 yrs. %	Composite of all ages %
5	Talking to God	34.8	45.8	23.2	35.5
5	Pray to God	10.5	7.3	0.0	7.5
4	Worshiping God	4.4	2.0	5.8	4.0
4	Thanking God	6.1	5.2	10.0	6.6
4	Asking God for Something	13.8	9.4	18.8	13.6
4	Asking Forgiveness for Sin	3.7	4.2	5.8	7.5
4	Serious Thought	0.0	1.0	17.4	3.8
3	Praying or To Pray	10.5	3.1	5.8	7.5
2	Miscellaneous	5.0	3.1	2.9	4.0
1	No Response	11.0	18.8	10.0	13.0

TABLE 8, B.

SHOWING THE PERCENTAGE OF EACH AGE GROUP GIVING RESPONSES OF EACH OF THE SEVERAL DEGREES OF UNDERSTANDING OF THE CONCEPT "PRAYER".

		As above %	As above %	As above %	As above %
1	No Response	11.0	18.8	10.0	13.0
2	Wrong Idea	5.0	3.1	2.9	4.0
3	Confused Answer	10.5	3.1	5.8	7.5
4	Fair Understanding	28.0	21.8	57.8	32.3
5	Superior Answer	45.3	53.1	23.2	43.0

TABLE 9, A.

SHOWING THE MEANINGS ATTACHED TO THE CONCEPT "IMMORTALITY" BY THE THREE HUNDRED AND FORTY-SIX CHILDREN AND THE PERCENTAGE OF EACH AGE GROUP GIVING THE SEVERAL RATED RESPONSES.

Rating	"IMMORTALITY"	Age Group 8-12 yrs. %	Age Group 13-15 yrs. %	Age Group 16-18 yrs. %	Composite of all ages %
5	Everlasting Life	0.0	6.3	11.6	4.0
5	Never Die	1.1	4.2	8.7	3.5
5	Living Forever	0.6	5.2	5.8	2.9
3	Immortal	2.2	6.3	2.9	3.5
3	Jesus or God	2.2	0.0	2.9	1.7
3	Something not mental or human	2.7	9.4	5.8	5.2
2	Unreal	0.0	1.0	1.4	0.6
2	Impure — Immoral	0.0	2.0	10.0	2.6
2	Miscellaneous	3.4	3.1	5.8	3.8
1	No Response	87.8	62.5	44.9	73.2

TABLE 9, B.

SHOWING THE PERCENTAGE OF EACH AGE GROUP GIVING RESPONSES OF EACH OF THE SEVERAL DEGREES OF UNDERSTANDING OF THE CONCEPT "IMMORTALITY".

		As above %	As above %	As above %	As above %
1	No Response	87.8	62.5	44.9	73.2
2	Wrong Idea	3.4	6.1	17.2	7.0
3	Confused Answer	7.1	15.7	11.6	10.4
4	Fair Understanding	0.0	0.0	0.0	0.0
5	Superior Answer	1.7	15.7	26.1	10.4

TABLE 10, A.

SHOWING THE MEANINGS ATTACHED TO THE CONCEPT "CHURCH" BY THE THREE HUNDRED AND FORTY-SIX CHILDREN AND THE PERCENTAGE OF EACH AGE GROUP GIVING THE SEVERAL RATED RESPONSES

Rating	"CHURCH"	Age Group 8-12 yrs. %	Age Group 13-15 yrs. %	Age Group 16-18 yrs. %	Composite of all ages %
5	Place of worship	22.0	35.4	31.9	27.7
5	Group of Believers in God	1.1	3.1	1.4	1.7
4	God's House or Home	22.0	21.9	21.7	22.0
4	Where you Pray	7.2	0.0	2.9	4.3
4	Where you Learn About God	9.9	4.2	2.9	6.9
3	Structures of Truth	1.1	2.0	4.3	2.0
3	Holy Place	2.2	1.0	4.3	2.3
3	Place to go on Sunday	0.6	0.0	0.0	0.3
2	Sunday School	2.2	0.0	0.0	1.4
2	Miscellaneous	2.2	2.0	4.3	2.6
1	No Response	29.2	30.1	24.6	28.9

TABLE 10, B.

SHOWING THE PERCENTAGE OF EACH AGE GROUP GIVING RESPONSES OF EACH OF THE SEVERAL DEGREES OF UNDERSTANDING OF THE CONCEPT "CHURCH".

		As above %	As above %	As above %	As above %
1	No Response	29.2	30.1	24.6	28.9
2	Wrong Idea	4.4	2.0	5.7	4.0
3	Confused Answer	3.9	3.0	8.6	4.6
4	Fair Understanding	39.1	26.1	27.5	33.2
5	Superior Answer	23.1	38.5	33.5	29.4

Introduction to Following Table. In order that the percentage of "no response" record, of "wrong idea," of "confused," of "fair understanding," and of "superior" response of the group may be seen, the table showing the various types of response is given. This table is made up from the percentage of the various types of response given in the "B" part of the tables, wherein are reported the classifications of the meanings given by the children. The table reveals the amount of different degrees of understanding had by the group studied.

Table 11 shows the percentage of the various types of response as made by the entire group of three hundred and forty-six children.

Measures	No Response	Wrong Idea	Confused Answer
N	100	100	100
Mode	47.5	7.5	2.5
Range (actual)	7.5-97.1	0-30.4	0.0-56.4
Median	49.1	6.9	7.1
P10-P90	20.0-86.2	1.5-14.1	1.3-20.0
P25-P25	31.2-73.8	3.7-9.8	3.2-14.5
Mean	51.5	7.6	9.7

Measures	Fair Understanding	Superior Answer
N	100	100
Mode	2.5	2.5
Range (actual)	0-60.5	0-75.1
Median	12.8	9.7
P10-P90	1.7-40.0	1.5-34.0
P25-P25	4.2-28.6	3.8-18.5
Mean	17.0	14.6

This table should be read as follows;

To none of the concepts did the group as a whole make as low as 0-4.9 percent of "no response" record. To thirty-four of the concepts the group made between 0-4.9 percent of "wrong idea" response, etc.

TABLE 11

SHOWING THE DISTRIBUTION OF THE PERCENTAGES OF THE VARIOUS TYPES OF RESPONSE OF THE ENTIRE GROUP OF THREE HUNDRED AND FORTY SIX CHILDREN TO THE ONE HUNDRED CONCEPTS.

NUMBER OF CONCEPTS OF EACH CLASSIFICATION ON EACH PERCENTAGE LEVEL

Percentage of response	No Response	Wrong Idea	Confused Answer	Fair Understanding	Superior Answer
95-100	1	0	0	0	0
90-94.9	3	0	0	0	0
85-89.9	8	0	0	0	0
80-84.9	7	0	0	0	0
75-79.9	4	0	0	0	1
70-74.9	6	0	0	0	1
65-69.9	2	0	0	0	0
60-64.9	5	0	0	1	0
55-59.9	7	0	1	0	1
50-54.9	5	0	0	4	1
45-49.9	11	0	0	2	2
40-44.9	5	0	0	3	2
35-39.9	5	0	1	5	1
30-34.9	8	1	1	8	5
25-29.9	4	1	3	7	5
20-24.9	9	0	4	5	2
15-19.9	6	5	13	10	13
10-14.9	2	17	13	11	15
5- 9.9	2	42	24	15	18
0- 4.9	0	34	40	29	33

See foregoing page for balance of table.

Interpretation of Table 11. The percentage of "no response" record for the entire group ranged from 7.5 to 97.1, with an average of 51.5, which reveals either a significant lack of understanding of the concepts by the group, or an inability to state the meanings associated with the concepts.

The low percentage of "wrong idea" and "confused" response by the entire group shows that definitely wrong or partly wrong ideas are not being formed concerning these concepts.

The "fair understanding" percentage of response, while slightly higher than the "superior" response, is only a small part of the total. Both of these types of response show that the children do not understand the concepts commonly used in the curriculum of the church school and the religious books and magazines circulated in the home.

The Concepts in Order of Familiarity. Table 12 presents the entire list of one hundred concepts which were used in the free-association test, giving the concepts in the scale of "superior answer" response. The three age groups are placed in parallel columns in order that a comparison between the concepts best understood might be made.

TABLE 12.
SHOWING THE CONCEPTS AND THE PERCENTAGE OF SUPERIOR MEANING ATTACHED TO THE AGE GROUPS TO EACH CONCEPT.

8-12 years		13-15 years		16-18 years	
Son of God	73.4	Christmas	95.0	Christmas	92.7
Christmas	61.4	Son of God	73.2	Son of God	84.0
God	49.8	Prayer Meeting	67.7	God	69.5
Easter	46.4	God	59.4	Cross	65.1
Prayer	45.3	Prayer	53.1	Commandments	56.7
Preacher	43.9	Preacher	49.0	Prayer Meeting	56.4
Prayer Meeting	41.9	Cross	47.9	Preacher	55.0
Cross	39.3	Duty	43.7	Easter	50.7
Sunday	29.8	Hell	41.6	Sunday School	48.8
Commandments	27.2	Resurrection	40.7	Children of God	46.3
Faith	26.6	Commandments	38.6	Duty	43.3
Holy Spirit	25.5	Church	38.5	Worship	42.0
Children of God	25.4	Sunday	38.5	Resurrection	40.5
Church	23.1	Easter	38.5	Heathen	39.1
Service	22.1	Brotherhood of Man	37.2	Anti-Christ	36.2
Hell	22.0	Disciple	35.2	Hell	36.2
Old Testament	21.0	Holy Spirit	33.3	Evolution	36.1
Duty	20.4	Anti-Christ	32.1	Confession	34.8
Resurrection	20.4	Old Testament	29.2	Disciple	34.7
Disciple	19.9	Children of God	28.1	Church	33.3
Lord	19.5	Fatherhood of God	27.0	Sunday	30.4
Fatherhood of God	17.7	Lord	27.0	Old Testament	30.4

TABLE 12—(Continued)
SHOWING THE CONCEPTS AND THE PERCENTAGE OF SUPERIOR MEANING ATTACHED TO THE AGE GROUPS TO EACH CONCEPT.

8-12 years		13-15 years		16-18 years	
Brotherhood of Man	17.2	Conscience	25.0	Protestant	28.9
Christ	16.7	Faith	25.0	Christian	28.9
Heaven	16.0	Good Friday	24.0	Soul	28.8
Christian	15.5	Angel	24.0	Atheism	27.6
Forgiveness	13.8	Forgiveness	24.0	Faith	27.5
Temptation	13.8	Confession	22.9	Divine	27.4
Prophet	13.2	Soul	21.9	Lord's Prayer	26.3
Messiah	12.8	Divine	20.8	Immortality	26.1
Confession	12.7	Christian	20.8	Holy Spirit	26.1
Soul	12.0	Lord's Prayer	18.7	Love	26.0
Baptism	11.1	Baptism	18.7	Conscience	25.0
Kingdom of Heaven	11.0	Love	17.8	Religion	24.6
Lord's Prayer	10.8	Atonement	16.7	Prayer	23.2
Angel	10.5	Messiah	16.7	Spiritual	21.6
Mercy	10.5	Immortality	15.7	Temptation	21.6
Religion	9.9	Eternity	15.6	Mercy	20.5
Word of God	9.4	Sin	15.6	Omnipotence	20.2
Good Friday	8.8	Kingdom of Heaven	15.6	Brotherhood of Man	18.8
Sacred	8.3	Benediction	14.6	Good Friday	18.8
New Testament	8.3	Redemption	14.6	Benediction	18.8
Bible	7.7	Evolution	14.6	Lord	18.8
Lord's Supper	7.7	Worship	14.6	Sacrilege	18.7
Sin	7.7	Service	14.5	Scripture	15.9
Anti-Christ	6.4	Prophet	13.6	Bible	15.9
Conscience	6.1	Protestant	13.5	Redemption	15.9
Sunday School	6.1	Word of God	13.5	Kingdom of Heaven	14.5
Worship	5.6	Pacifist	13.5	Messiah	14.4
Protestant	5.5	Mercy	13.5	Fatherhood of God	14.4
Missions	4.4	Religion	12.5	Angel	13.1
Scripture	4.4	Bible	11.5	Pacifist	13.0
Communion	4.3	Sacred	10.4	Conversion	13.0
Love	3.9	Heathen	10.4	Infidel	13.0
Conversion	3.7	Temptation	10.3	Communion	13.0
Eternity	3.7	Atheism	9.4	Forgiveness	13.0
Benediction	3.7	Conversion	9.4	Service	12.8
Will of God	3.2	Scripture	9.4	Miracle	10.1
Pacifist	2.8	Communion	8.3	Atonement	10.1
Redemption	2.7	Spiritual	8.3	Grace	8.7
Gift of the Spirit	2.3	Christ	8.3	Baptism	7.4
Miracle	2.2	Sunday School	7.4	Salvation	7.2
Pentecost	2.2	Worldliness	7.3	Modernist	7.2
Immortality	1.7	Infidel	6.3	Sacred	7.2
Spiritual	1.7	Pentecost	6.3	Sect	5.8
Infidel	1.7	Miracle	6.3	Eternity	5.8
Worldliness	1.7	New Testament	6.3	Word of God	5.8
Righteousness	1.7	Catholic	5.2	Sin	5.8
Charity	1.7	Sect	5.2	Creed	5.7
Grace	1.7	Trinity	5.2	Heaven	4.3
Redemption	1.7	Salvation	4.2	Worldliness	4.3
Trinity	1.7	Supernatural	4.2	Passion	4.3

TABLE 12—(Continued)
SHOWING THE CONCEPTS AND THE PERCENTAGE OF SUPERIOR MEANING ATTACHED TO THE AGE GROUPS TO EACH CONCEPT.

8-12 years		13-15 years		16-18 years	
Passion	1.2	Sacrilege	4.2	Righteousness	4.3
Atonement	1.2	Omnipotence	4.2	Gift of the Spirit	2.9
Atheism	1.1	Lord's Supper	4.2	Sacrament	2.9
Sect	1.1	Will of God	3.1	Gospel	2.9
Creed	1.1	Modernist	3.1	Charity	2.9
Omnipotence	1.1	Grace	3.1	Missions	2.9
Sacrilege	1.1	Charity	3.1	Repentance	2.9
Salvation	1.1	Missions	3.1	Pentecost	2.9
Heaven	0.6	Repentance	2.0	Catholic	2.9
Savior	0.6	Savior	2.0	New Testament	1.4
Evolution	0.6	Gospel	2.0	Omniscience	1.4
Supernatural	0.6	Sacrament	2.0	Will of God	1.4
Catholic	0.6	Gift of the Spirit	2.0	Supernatural	1.4
Millenium	0.6	Omniscience	1.0	Trinity	1.4
Sacrament	0.6	Millenium	1.0	Christ	1.4
Gospel	0.0	Heaven	1.0	Asceticism	0.0
Omniscience	0.0	Creed	1.0	Millenium	0.0
Modernist	0.0	Asceticism	1.0	Savior	0.0
Higher Criticism	0.0	Passion	1.0	Lord's Supper	0.0
Incarnation	0.0	Righteousness	0.0	Bigotry	0.0
Regeneration	0.0	Bigotry	0.0	Revelation	0.0
Fundamentalist	0.0	Revelation	0.0	Fundamentalist	0.0
Revelation	0.0	Fundamentalist	0.0	Regeneration	0.0
Bigotry	0.0	Regeneration	0.0	Incarnation	0.0
Asceticism	0.0	Incarnation	0.0	Higher Criticism	0.0
Mysticism	0.0	Higher Criticism	0.0	Sacrifice	0.0
Sacrifice	0.0	Sacrifice	0.0	Mysticism	0.0

Interpretation of Tables Given Above. It will be seen from the preceding tables that there is a definite increase in clearness of meaning attached to the various concepts in the different groups. In the 8-12 age group only thirteen concepts were given superior answer responses by one-fourth or more of the group. In the 13-15 age group, twenty-four concepts were responded to with superior meanings by one-fourth or more of the group, while in the 16-18 age group, thirty-three of the concepts were so responded to by one-fourth or more of the group.

In comparing the concepts to which superior meanings were attached by one-fourth or more of each group, it is noted that the concepts to which one-fourth or more of the 8-12 age group gave superior answers were included in one-fourth or more of the other age groups as well, with the exception of the concept "Prayer," which was slightly below in the 16-18 age group. These concepts deal almost entirely with special religious days or places. The

commonly used concepts of "God," "Faith," "Commandments," also appear. Meanings for these concepts could well be derived from experiences outside of teaching of the church school.

In the two older age groups will be noted an increase of general terms of an ethical and experiential character, such as "Conscience," "Worship," "Forgiveness," and the like. The majority of the concepts of these groups to which clear meanings are attached by one-fourth or more of the group, are of the character of special religious days, places, and events.

The entire group shows a lack of clear understanding of the more ethical and experimental concepts, and only a fair understanding or less of all of the concepts.

Summary and Conclusions. Three hundred and forty-six free-association tests on one hundred representative religious concepts were analyzed and the following conclusions reached:

1. There is a high percentage of "no response" records for the concepts as a whole on the part of 8-12 age groups, with a decided lessening of "no response" with the older groups. This may be taken to mean a lack of familiarity with these concepts, revealing a poverty of meaningfulness in relation to them. The factor of language expression might condition this situation. To analyze this condition, the second form of test described in the following chapter was used.

2. The percentage of "wrong idea" responses was low, and about equal with all age groups. This fact might be caused by the large percentage of "no response" records or the large percentage of "confused," "fair understanding," or "superior" responses.

3. The "confused" response was also small, perhaps for the same reason as the "wrong idea" response. The percentage of "confused" answer was generally higher than the "wrong idea," which might reveal the condition that when the child did respond, the meaning was vague and confused, rather than positively wrong.

4. The largest percentage of response is found in the "fair understanding" division, especially among the older age groups. By "fair understanding" is meant a meager though relatively clear meaning. The median percentage of such response in the case of the 8-12 age group is only 5.4, which is very low. The median for 13-15 age group is 20.5, revealing a growth in understanding.

5. The "superior" answer response is also small. It does not reveal the growth with age, as does the "fair understanding." The median of the 8-12 age group is 5 per cent, while the 13-15 age group is only 11. 7per cent and the 16-18 age group only 12.7 per cent. The spread of the group is practically the same.

6. The concepts to which the more clear meanings are attached are in general the more commonly used ones in everyday experience, and not particular ones limited to either special teaching or denominational emphasis. They are primarily concepts dealing with religious days, persons and places. The ethical and experiential concepts are almost exclusively found among the ones given the largest percentage of superior answer response among the older group, and increase in number with maturation.

7. An analysis of the meanings attached to the concepts "God," "Christ," "Lord," "Holy Spirit," and "Cross" reveals a confused use of the terms God, Jesus, Christ. They are used for each other in a large number of instances; for example, " 'Cross'—Where God was killed." " 'God'—Jesus." " 'Christ'—Created world." " 'Christmas'—When God was born." Answers of this type were quite common.

8. The responses in general reveal a wide variety of understanding among the children studied. Lack of experience or familiarity with these concepts is the outstanding conclusion.

CHAPTER IV
THE MULTIPLE CHOICE TEST — DESCRIPTION AND RESULTS

While the free-association test reveals some very significant facts as presented in the previous chapter, a further experimentation was carried on for several reasons. As large a group of children as possible was sought in order that errors of false response, etc., might be eliminated. Also, further data was desired regarding the responses already received, and a different form of test was sought to eliminate whatever of the "no response" element was due to inability of the children to express themselves. Furthermore, the free-association test took between thirty-five and forty-five minutes to give, depending upon the age group. This fact made it impossible to give the test in any large number of church schools, as the leaders in charge were reluctant to give the entire session to the test. The test described in this chapter can be given in fifteen minutes. In making this second test, the meanings which were given in the greatest frequency in the free-association test were used. In a few concepts, where the meanings wre so nearly alike that the difference in meaningfulness would not be brought out,t other meanings given by the children were chosen. In all cases the five possible meanings given in the multiple choice test were meanings actually given by the children in the previous free-association test. The theory underlying this method is that by using the meanings given by a representative group of children, the responses of all the other children will differentiate themselves in these meanings. The more frequent responses chosen by the children will give the meanings associated by the group with the concepts.

The list of one hundred concepts used in the free-association test were rated by twenty-two religious workers, teachers of Sunday School classes and directors of religious education. Sixty of the concepts were rated of average or higher importance to the religious thinking of the various age groups. These were used in the multiple choice test.

The multiple choice or best answer completion form of test was used because it made possible a range of choice of meanings. As in the free-association method, only one response was asked for. The children in each case were asked to underline the word or phrase which *most nearly* explained what the concept meant to them. The best answer emphasis was avoided and meaningfulness stressed. The following four pages give the test in full.

RELIGIOUS CONCEPT TEST

Prepared by

ROY G. BOSE

University of Southern California

Name _____ Age _____

School Grade _____ Name of school now attending _____

Church School Department _____ Church _____

City _____ Are you a Church member? _____

Underline number of years you have attended Church School, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17.

Do you have family worship in your home? _____

DIRECTIONS

We are anxious to learn what boys and girls understand by the religious words given in large type below. To the right of each large type word in the left hand column are five possible meanings. In each case draw a line under that one of the five possible meanings which you think most clearly explains what the large type word at the left means to you. Underline only one. Be sure to underline that one which most clearly explains what you mean by the religious word at the left.

These samples will show you what is wanted.

HEAVEN _____ Place to rest, God's house, Our future home, In the sky, Reward for right life.

MIRACLE _____ Unexpected happening, Something done by God, Out-of-ordinary event, A wonder, Magic trick.

ANGEL _____ God's helper, Person with wings, Imaginary creature, Symbol of Idealism, Good person.

HEATHEN _____ Foreigner, Worship idols, Not Christian, Holy place above, Unbeliever in God.

21. SACRIFICE_____ Give up something, Jesus' Crucifiction, Give your life, Something given to God, Burnt offerings.

22. LORDS SUPPER_____ Supper for Lord, Supper before Crucifiction, Eat with God, Take bread & wine, Christ's body and blood.

23. BROTHERHOOD OF MAN____ Brothers in Christ, All men sons of God. All men equal, Fraternal order, All men brothers.

24. WORSHIP_____ Idolize, Love someone, Praise God, Pray and sing in Church, Believe in God.

25. SON OF GOD_____ Christian, Jesus, Any person, Gods only Son, Adam.

26. SERVICE___ To be waited upon, Wait on someone, Willing helpfulness, Meeting in Church, Work for someone.

27. RESURRECTION_____ Jesus rose from dead, Easter, Live again, Crucifiction of Jesus, Born again.

28. SACRED_____ Frightened, Something valuable, Not to tell, Belongs to God.

29. FAITH_____ Belief in God, Wholehearted belief, Confidence in self, Keep promise, Belief in someone.

30. CHRISTMAS_____ Santa Claus, Get presents, Vacation, Jesus' Birthday, Give Gifts.

31. SUNDAY_____ First day of week, Go to Church, Holiday, Day God rested, Day of Worship.

32. LORD_____ God, Our King, Saviour, Our Master, Jesus Christ.

33. SOUL_____ Inner Spirit, Conscience. Part that never dies, Your body, Your thoughts.

34. CROSS_____ Two sticks crossed, Way of Salvation, Symbol of Christianity, Where Jesus was nailed, Angry

35. LORDS PRAYER___ Universal Prayer, 23rd Psalm, Prayer to Lord, Prayer Jesus taught, Say at night.

36. REDEMPTION___ Saved, Give yourself up, Not to kill, Redeemed from sin, Forgiveness.

37. SPIRITUAL_____ Belief in spirits, Christian, Not flesh and blood, Talking to dead people, Spirit of God.

38. EASTER_____ Ascension of Jesus, Jesus rose from the dead, Birthday of Jesus, Easter eggs.

39. RIGHTEOUSNESS_____ Truthfulness, Loyalty to right, Believe in God, Your privileges, Do Gods will.

40. LOVE_____ Friendship, Passion, Worship, Like somebody, Good works.

41. DISCIPLE_____ Preacher, A Learner, Punishment for disobeying, One of the twelve, Followers of Jesus.

42. BAPTISM_____ To be immersed, Receive a name, Wash sins away, Join Church, Holy water on head.

43. GOSPEL_____ Sermon, Salvation through Christ, Talk about people, Books of New Testament, Life of Christ.

44. COMMANDMENTS _____ Rules to obey, God's list of don'ts, Will of Christ, Religious laws, Rules given Moses.

45. ETERNITY_____ After end of World, Never die, Everlasting life, Endless time.

46. WORD OF GOD_____ Bible, Truth, God's will for man, God's promise, Ten Commandments.

47. CONFESSION_____ Tell of sins, Admit belief in God, Tell truth, Confess to Priest, Repentance.

48. TEMPTATION _____ Have a temper, Desire to do wrong, Urgings of Satan, Do evil, Swerve from right.

49. IMMORTALITY _____ Eternal, Not human, Soul lives forever, Unreality, Wrong-doing.

50. WILL OF GOD_____ Inherit property, Bible, Commandments of God. Love everybody, Do the right.

51. RELIGION _____ Belief in God, Be a Christian, Going to Church Church Sect, Belief in Bible, Bible.

52. CHILDREN OF GOD _____ The saved, Jews, All children, Believers in God, Human beings.

53. SCRIPTURE _____ Books of Bible, Tracts, The whole Bible, Sayings of Jesus, Verses from Bible.

54. DIVINE_____ Pure, Separate into parts, Like God, Sacred. Everlasting.

55. PACIFIST_____ A comforter, Condemns War, Peace-maker Religious Sect, Name of Ocean.

56. CONSCIENCE _____ Your heart, Your thoughts, Your soul, Feeling of right or wrong, Voice of God.

57. CREED_____ Selfishness, America's creed, Doctrines of Apostles, Part of Church Service, Statement of faith.

58. CHURCH_____ Holy place, Group of believers, Gods house, Place of worship, Sunday school

59. SACRILEGE_____ Against God's laws, Swearing, Mock at religion, Destroy Holy things, Afraid.

60. WORLDLINESS_____ Friendliness, Knowing world, Broadmindedness, Love of things, Ungodliness.

The relationship between the free-association form and the multiple choice is seen from the character of the coefficient derived from the correlation of a random sampling of the scores made by one hundred and four children in both forms of the test. One hundred and four children from the University High School and three church schools took both forms of the test. The time interval between the free-association form, which was given first, and the multiple choice form, was six weeks. The reliability coefficient was .54, with a probable error of .05, which may be interpreted to mean that in a large measure the second test will measure what the first one purports to measure.

Nineteen hundred and sixty-one tests of the second form were given. Children of the ages eight to eighteen were tested in twenty-two churches representing all the major evangelical denominations. A large number of the tests were administered by the writer. In some cases the directors of religious education in the churches, where the test was given, administered the test. A specific set of directions for the examiner was placed in the hands of those administering thet test. A copy of these instructions may be found in the Appendix of this study.

To make the method of scoring as unbiased as possible, ten directors of religious education and religious workers were asked to rate the responses used in the test. The response which was most nearly similar to the definition given in the *Dictionary of Religion and Ethics* was rated as five (5) by the writer before the rating sheets were sent to those who were asked to give their evaluation. The persons rating these responses were asked to consider the "5" responses as highest and rate the others 4, 3, 2, 1, as they judged them to deviate from the accepted standard. "1" was considered as farthest from the standard definition.

The "superior," "fair understanding," "confused," and "wrong idea" rating was not used for the reason that in some of the concepts, none of the meanings might be wrong, yet they would not most nearly explain the concept. In taking the most frequent responses for the test, in some cases no particularly "wrong" ideas appeared. It would not represent the response of a large group, if a wrong meaning given only by one or two were to have been used.

In presenting and evaluating the results of this test, the rating by the ten religious work experts is used. It should be stressed, however, that the important part of the study is not which meaning is correct, but rather which of the five possible meanings attached to each concept is chosen by the children. The actual choice rather than the evaluation sholud be noted.

In order that the degree of consistency of performance of the group on the multiple choice test might be determined, a random sampling of two hundred and thirty-one tests was taken from the nineteen hundred and seventy-nine tests. This sampling included tests from all the age groups. The odd- and even-numbered concepts were scored separately and a correlation was made of the two parts of the same test. The coefficient of correlation was .86 with a probable error of .012, which when corrected by the Spearman prophecy formula was raised to .92 with a probable error of .008. Garrett[1] indicates that any coefficient of correlation over .80 for two parts of the same test is a significant measure of reliability. From this data it would seem that the conclusion that there was a high consistency of performance on the part of the children is justified.

Introduction to the Percentage Tables. The sixty concepts with the five possible meanings and the percentage of response on each meaning by the different age groups are presented in tabular form. These tables should be read as follows:

Immediately under the capitalized concept are the five possible meanings and the "no response." To the left of the meanings are the ratings given each. To the right of the concept are the age groups and the composite group. In the columns under each age group are the percentage figures denotin gthe percentage of each age group which chose that particular meaning as most nearly explaining the concept. The percentage of no response for each age group and the entire group is also listed.

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[1] H. E. Garrett, *Statistics in Phychology and Education*, 269.

TABLE 13.

SHOWING THE SIXTY CONCEPTS USED IN THE MULTIPLE CHOICE TEST AND THE MEANINGS, WITH THE PERCENTAGE OF RESPONSE TO EACH BY THE AGE GROUPS.

	Concept	*Percentage of each age group choosing each meaning.*			
Rating	WILL OF GOD	8-12 yrs. %	13-15 yrs. %	16-18 yrs. %	Composite %
5	Commandments of God	29.7	37.7	37.9	34.0
4	Do the Right	22.6	28.7	30.5	26.1
3	Bible	9.5	9.6	6.0	9.0
2	Love Everybody	17.3	18.1	18.1	17.7
1	Inherit Property	1.6	0.9	0.6	1.2
0	No Response	19.3	5.0	6.9	12.0
Rating	NEW TESTAMENT	8-12 yrs. %	13-15 yrs. %	16-18 yrs. %	Composite
5	Second part of Bible	41.9	42.8	39.7	41.9
4	About Jesus	35.7	42.8	40.7	39.1
3	About God	8.9	5.5	1.7	6.1
2	A New Religion	6.4	8.1	7.0	7.1
1	First part of Bible	4.5	0.4	2.6	2.8
0	No Response	2.6	0.4	8.3	3.0
Rating	MISSIONS	8-12 yrs. %	13-15 yrs. %	16-18 yrs. %	Composite %
5	Extend Gospel	25.9	46.8	54.0	38.1
4	Convert Heathen	18.7	18.7	16.2	18.1
3	Go on Journey	8.5	3.1	2.9	5.6
2	Old Catholic Churches	35.3	25.0	11.4	27.7
1	Purposes in Life	5.8	5.3	7.3	5.8
0	No Response	5.8	1.1	8.2	4.7
Rating	SUNDAY SCHOOL	8-12 yrs. %	13-15 yrs. %	16-18 yrs. %	Composite %
5	Place of Religious Instruction	16.3	49.5	70.5	37.7
4	Study the Bible	9.2	5.3	2.9	6.9
3	Learn about God and Jesus	46.4	34.4	15.6	36.8
2	Place of Worship	23.9	15.5	9.8	17.4
1	Church	2.9	0.6	0.0	1.1
0	No Response	1.3	0.7	2.2	1.2
Rating	BIBLE	8-12 yrs. %	13-15 yrs. %	16-18 yrs. %	Composite %
5	Christian Guide Book	12.8	16.5	15.6	14.3
4	God's Word	54.4	64.0	59.0	58.3
3	Sacred History	7.9	10.5	15.2	10.7
2	Book about Jesus	22.1	7.9	7.0	14.4
1	Story of Jewish Race	0.9	1.1	3.2	1.3
0	No Response	1.9	0.0	0.0	1.0

TABLE 13—(Continued)

Concept — *Percentage of each age group choosing each meaning.*

Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	BROTHERHOOD OF MAN	%	%	%	%
5	All Men Brothers	31.0	31.1	30.8	30.7
4	All Men Sons of God	24.8	32.1	40.5	30.3
3	Brothers in Christ	26.3	17.3	15.9	21.7
2	All Men Equal	9.9	16.3	9.2	12.2
1	Fraternal Order	0.8	1.8	0.6	0.9
0	No Response	7.2	1.4	3.0	4.2
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	HOLY SPIRIT	%	%	%	%
5	Spirit of God	69.9	70.6	74.3	70.7
4	Member of Trinity	2.6	5.8	10.5	5.1
3	Jesus	8.7	7.1	2.6	7.0
2	Religious Feeling	5.7	8.6	8.9	7.1
1	An Angel	11.0	5.2	1.1	7.1
0	No Response	2.1	2.7	2.6	2.4
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	CONVERSION	%	%	%	%
5	Become Christian	39.5	52.5	67.3	48.7
4	Saved	28.7	28.7	20.3	27.4
3	Join Church	6.1	5.2	9.8	5.3
2	Be Baptized	0.0	1.0	0.3	0.4
1	Talking to Someone	17.6	6.8	2.0	11.1
0	No Response	8.1	5.8	0.3	6.1
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	SACRILEGE	%	%	%	%
5	Destroy Holy Things	14.4	13.5	8.6	13.1
4	Mock at Religion	11.5	24.8	40.6	21.0
3	Against God's Laws	32.0	44.7	36.8	36.7
2	Swearing	7.2	4.5	1.4	5.2
1	Afraid	3.4	2.0	1.1	2.5
0	No Response	30.6	20.5	11.5	21.5
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	ETERNITY	%	%	%	%
5	Endless Time	16.8	17.4	23.8	18.2
4	Never Die	10.2	6.1	2.0	7.4
3	Everlasting Life	42.8	61.1	63.8	52.8
2	After End of World	10.9	8.6	5.4	9.2
1	Long Time	0.0	0.0	0.0	0.0
0	No Response	19.3	6.8	5.0	12.4
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	WORD OF GOD	%	%	%	%
5	God's Will for Men	8.7	11.5	17.5	11.1
4	Bible	41.9	53.4	52.7	47.9
3	Truth	6.5	8.0	9.2	7.5
2	Ten Commandments	20.4	15.2	10.5	16.9
1	God's Promise	7.7	10.1	5.4	8.2
0	No Response	14.8	1.8	4.7	8.4

TABLE 13—(Continued)

Rating	*Concept*	*Percentage of each age group choosing each meaning.* 8-12 yrs. %	13-15 yrs. %	16-18 yrs. %	Composite %
	IMMORTALITY				
5	Soul Live Forever	22.2	33.0	42.5	29.4
4	Eternal	15.2	20.5	20.3	18.2
3	Not Human	21.4	23.2	9.8	20.2
2	Unreality	2.4	5.7	4.5	3.9
1	Wrong-doing	11.0	9.1	11.7	10.5
0	No Response	27.8	8.5	11.2	17.8
Rating	RESURRECTION	8-12 yrs. %	13-15 yrs. %	16-18 yrs. %	Composite %
5	Live Again	4.3	7.4	11.1	6.5
4	Jesus Arose from Dead	70.0	73.0	74.0	71.6
3	Easter	6.5	5.7	3.5	5.9
2	Born Again	6.7	9.6	8.3	8.7
1	Crucifixion of Jesus	5.2	2.9	1.1	3.7
0	No Response	7.3	1.4	2.0	3.6
Rating	SACRED	8-12 yrs. %	13-15 yrs. %	16-18 yrs. %	Composite %
5	Belongs to God	17.4	21.7	22.5	19.5
4	Holy	41.8	66.2	67.9	54.9
3	Something Valuable	6.8	5.7	3.8	6.1
2	Not to Tell	3.8	1.1	0.0	2.3
1	Frightened	18.7	5.0	0.6	10.5
0	No Response	11.5	0.3	5.2	6.7
Rating	FAITH	8-12 yrs. %	13-15 yrs. %	16-18 yrs. %	Composite %
5	Wholehearted Belief	7.8	16.5	27.3	14.5
4	Belief in God	66.4	65.6	52.1	63.1
3	Belief in Someone	7.8	7.7	12.4	8.5
2	Confidence in Self	2.8	6.8	2.9	3.4
1	Keep Promise	10.0	2.7	1.7	6.0
0	No Response	5.2	0.7	3.3	4.5
Rating	LORD'S PRAYER	8-12 yrs. %	13-15 yrs. %	16-18 yrs. %	Composite %
5	Universal Prayer	6.3	8.8	17.5	9.0
4	Prayer Jesus Taught	49.7	49.2	54.9	50.3
3	Say at Night	4.9	2.5	1.1	3.4
2	Prayer to Lord	15.9	12.7	9.8	13.8
1	Twenty-third Psalm	17.4	12.3	11.1	14.5
0	No Response	5.8	14.5	5.6	9.0
Rating	REDEMPTION	8-12 yrs. %	13-15 yrs. %	16-18 yrs. %	Composite %
5	Redeemed from Sin	29.0	54.8	62.2	43.7
4	Saved	16.0	15.8	9.2	14.9
3	Forgiveness	18.5	15.0	16.2	16.8
2	Give Yourself up	12.4	8.3	5.1	9.7
1	Not to Kill	7.1	0.9	0.0	3.8
0	No Response	17.0	5.2	6.3	11.1

TABLE 13—(Continued)

Concept	Percentage of each age group choosing each meaning.			
Rating	8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
SOUL	%	%	%	%
5 Part that never Dies	46.3	48.8	44.8	46.8
4 Inner Spirit	27.0	37.2	41.0	33.0
3 Your Thoughts	8.1	3.6	2.0	5.4
2 Conscience	5.6	7.5	6.0	6.6
1 Your Body	6.5	2.5	0.3	4.0
0 No Response	6.5	0.4	55.9	4.2
Rating	8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
CHRISTMAS	%	%	%	%
5 Jesus' Birthday	89.0	94.5	96.5	92.6
4 Give Gifts	3.5	1.6	2.0	2.5
3 Santa Claus	3.4	1.6	0.6	2.4
2 Get Presents	1.3	0.3	0.0	0.7
1 Vacation	0.6	0.7	0.0	0.2
0 No Response	2.2	1.4	0.9	1.6
Rating	8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
DISCIPLE	%	%	%	%
5 Followers of Jesus	54.5	61.8	75.6	60.5
4 One of the Twelve	18.4	26.0	19.1	21.2
3 A Learner	4.4	5.1	4.8	4.6
2 Preacher	8.4	4.8	1.1	5.7
1 Punishment for Disobeying	2.7	1.1	1.4	1.9
0 No Response	11.1	1.2	2.0	6.1
Rating	8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
BAPTISM	%	%	%	%
5 Wash Away Sins	30.3	39.5	43.2	35.8
4 To be Immersed	8.7	12.8	14.3	11.1
3 Join Church	17.4	15.3	14.9	16.2
2 Receive a Name	5.5	7.6	8.6	6.9
1 Holy Water on Head	25.3	16.7	11.7	20.0
0 No Response	12.2	8.3	7.3	10.0
Rating	8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
OLD TESTAMENT	%	%	%	%
5 First Part of Bible	31.8	33.1	35.2	32.8
4 Early History	13.8	14.1	17.1	14.4
3 Beginnings of World	16.6	22.8	19.1	19.3
2 Before Jesus	23.1	24.2	25.4	23.9
1 About Jesus	12.8	5.3	1.1	8.1
0 No Response	1.9	0.5	2.1	1.5
Rating	8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
SAVIOR	%	%	%	%
5 Saves from Sin	14.4	10.1	16.2	13.7
4 Jesus	48.6	57.2	63.2	54.0
3 Died for us	14.5	16.8	8.9	14.4
2 God	13.3	13.5	10.5	12.9
1 A Preacher	3.1	1.4	0.0	1.0
0 No Response	6.1	1.0	1.2	3.1

TABLE 13—(Continued)

Rating	*Concept*	*Percentage of each age group choosing each meaning.* 8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	FATHERHOOD OF GOD	%	%	%	%
5	Father of All	38.1	55.3	61.3	48.1
4	Our Creator	13.5	20.3	13.0	15.9
3	Father of Jesus	22.8	7.7	4.1	14.1
2	Father of Christians	13.9	12.7	10.2	12.5
1	God's Father	6.4	3.4	1.4	4.5
0	No Response	5.3	0.6	10.0	4.9
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	SALVATION	%	%	%	%
5	Saved from Sin	22.3	54.8	77.1	43.0
4	Become Christian	16.8	12.8	12.4	14.6
3	Salvation Army	8.6	2.0	1.0	5.1
2	Help Poor	24.3	12.8	3.5	16.7
1	Need Food	4.4	1.6	0.3	2.7
0	No Response	23.6	16.0	5.3	17.9
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	FORGIVENESS	%	%	%	%
5	Sins Pardoned	30.7	44.0	46.7	38.6
4	Excused by God	29.2	29.3	22.2	28.1
3	To Forget Wrongs	14.2	12.3	12.1	13.1
2	Be Easy on Somebody	5.5	1.1	2.3	3.4
1	Repentance	7.2	11.5	12.1	10.2
0	No Response	13.2	1.8	4.6	6.6
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	GOD	%	%	%	%
5	Supreme Being	1.1	10.0	20.6	7.5
4	Heavenly Father	67.2	65.5	56.5	64.8
3	Holy Spirit	12.8	12.3	7.8	12.1
2	Highest Ideal	1.5	9.8	11.4	6.2
1	Good Man	2.2	0.8	0.3	1.4
0	No Response	15.2	1.6	3.4	8.0
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	CHRISTIAN	%	%	%	%
5	Follower of Jesus	55.5	60 6	78.4	65.3
4	Saved Person	4.5	13.7	6.0	8.1
3	Believer in Bible	22.6	13.1	7.7	16.7
2	Good Person	1.6	2.9	2.0	2.1
1	Church Member	6.1	1.0	0.6	3.3
0	No Response	9.7	7.7	5.3	4.5
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	SUNDAY	%	%	%	%
5	Day of Worship	46.3	62.2	65.1	55.5
4	First Day of Week	7.4	4.5	3.8	5.6
3	Go to Church	7.7	2.4	1.4	4.7
2	Day God Rested	31.1	29.0	27.9	29.8
1	Holiday	1.9	0.8	0.0	1.1
0	No Response	5.6	1.1	1.8	3.3
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	LORD	%	%	%	%
5	Jesus Christ	27.4	27.0	29.2	27.5
4	Our Master	15.0	13.1	15.6	14.4
3	Savior	12.4	14.8	12.1	13.2
2	God	29.4	27.2	32.2	29.1
1	Our King	11.1	5.9	3.2	7.9
0	No Response	4.7	12.0	7.7	7.9

TABLE 13—(Continued)

Rating	*Concept*	*Percentage of each age group choosing each meaning.* 8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	CROSS	%	%	%	%
5	Where Jesus was Nailed	57.9	41.2	30.8	47.9
4	Symbol of Christianity	17.0	47.3	53.0	34.5
3	Way of Salvation	3.7	7.3	12.4	6.6
2	Two Sticks Crossed	10.6	3.3	1.1	6.3
1	Angry	4.0	0.8	0.0	2.1
0	No Response	6.8	0.1	2.7	2.6
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	SPIRITUAL	%	%	%	%
5	Not Flesh and Blood	6.3	12.4	20.3	10.8
4	Spirit of God	42.2	60.2	61.9	51.9
3	Christian	12.2	5.9	4.5	8.6
2	Belief in Spirits	22.3	14.8	5.4	16.8
1	Talking to Dead People	4.4	4.1	2.6	4.0
0	No Response	12.6	2.6	5.4	7.9
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	EASTER	%	%	%	%
5	Jesus Rose from Dead	68.0	68.6	71.7	69.1
4	Ascension of Jesus	7.6	17.1	17.1	12.6
3	Easter Eggs	3.4	2.7	1.4	2.8
2	Vacation	0.4	2.5	0.0	1.1
1	Birthday of Jesus	5.1	2.6	2.6	3.8
0	No Response	15.5	6.5	7.2	10.6
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	PREACHER	%	%	%	%
5	Proclaims Gospel	3.5	14.8	26.7	11.7
4	Tells about God	36.1	20.0	15.6	26.7
3	Teacher of Bible	21.7	28.9	34.6	26.5
2	Leader of Church	20.9	22.3	19.4	21.1
1	Priest	4.5	2.5	1.4	3.3
0	No Response	13.3	9.5	2.3	10.7
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	SON OF GOD	%	%	%	%
5	Jesus	66.2	74.2	76.1	71.9
4	God's Only Son	11.4	8.7	6.0	9.5
3	Christian	5.5	6.3	6.0	5.8
2	Any Person	8.7	9.1	10.1	9.1
1	Adam	3.9	1.3	1.1	2.5
0	No Response	4.3	0.4	0.7	1.2
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	SERVICE	%	%	%	%
5	Willing Helpfulness	30.7	54.6	66.3	49.5
4	Work for Some One	15.2	13.8	12.7	14.3
3	Waiting for Some One	10.5	6.1	1.7	7.5
2	Meeting in Church	24.5	18.5	14.6	19.8
1	To be Waited Upon	14.7	3.9	1.4	8.6
0	No Response	4.3	3.1	3.3	3.9
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	WORLDLINESS	%	%	%	%
5	Love of Things	18.0	20.5	15.6	18.6
4	Ungodliness	15.0	23.4	25.7	19.8
3	Knowing World	15.9	15.0	17.5	15.8
2	Broadmindedness	5.5	14.3	24.1	11.7
1	Friendliness	17.9	17.5	9.2	16.3
0	No Response	27.7	19.3	7.9	17.8

TABLE 13—(Continued)

Rating	*Concept*	*Percentage of each age group choosing each meaning.* 8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	GOSPEL	%	%	%	%
5	Salvation through Christ	11.9	23.6	25.7	18.4
4	Life of Christ	31.3	47.7	47.6	39.9
3	Book of New Testament	12.4	11.0	13.4	12.1
2	Sermon	15.9	13.6	9.2	14.0
1	Talk about People	2.4	1.0	0.3	1.6
0	No Response	26.1	3.1	3.8	14.0
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	COMMANDMENTS	%	%	%	%
5	Religious Laws	11.1	16.4	15.6	13.8
4	Rules Given Moses	29.7	42.7	47.9	37.4
3	God's List of Don'ts	7.7	5.4	5.4	6.4
2	Will of Christ	9.2	15.5	17.1	12.8
1	Rules to Obey	29.9	17.2	8.9	21.9
0	No Response	22.4	2.8	5.1	6.7
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	PRAYER	%	%	%	%
5	Talking to God	44.4	54.1	65.4	51.4
4	Thanking God	41.0	29.8	18.1	33.2
3	Asking God for Things	5.4	3.9	2.0	4.3
2	Serious Thoughts	1.5	3.4	5.4	2.8
1	Say Prayers Every Night	4.4	1.3	1.1	2.7
0	No Response	3.3	7.5	8.0	5.6
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	REPENTANCE	%	%	%	%
5	Sorry for Sins	25.4	38.2	41.0	33.0
4	Be Sorry	16.2	11.7	6.0	12.9
3	Make Amends	3.9	7.9	7.3	5.9
2	Give Self to God	22.1	19.8	18.4	21.0
1	Forgiveness by God	24.6	21.3	18.4	22.7
0	No Response	7.8	1.1	8.9	4.5
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	CONFESSION	%	%	%	%
5	Tell of Sins	39.6	40.2	27.9	36.7
4	Admit Belief in God	12.7	16.5	20.6	15.4
3	Tell Truth	11.3	7.5	8.9	9.4
2	Confess to Priest	6.1	5.0	3.5	5.1
1	Repentance	14.2	28.1	30.5	22.0
0	No Response	16.1	2.9	8.6	11.4
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	RIGHTEOUSNESS	%	%	%	%
5	Loyalty to Right	18.6	35.2	43.2	28.6
4	Do God's Will	31.6	34.8	30.0	32.5
3	Truthfulness	17.5	10.6	7.6	13.3
2	Belief in God	16.0	14.6	13.7	15.1
1	Your Privileges	3.3	0.9	1.1	2.1
0	No Response	13.0	4.8	4.4	8.4
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	LOVE	%	%	%	%
5	Worship	13.4	21.5	34.3	19.8
4	Friendship	51.0	47.8	28.3	46.1
3	Like Somebody	15.1	9.4	7.0	11.7
2	Passion	5.0	14.6	18.1	10.6
1	Good Works	9.2	7.4	7.0	8.1
0	No Response	6.3	9.3	15.3	13.7

TABLE 13—(Continued)

Concept	Percentage of each age group choosing each meaning.			
Rating	8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
DUTY	%	%	%	%
5 What God Wants Done	43.8	46.6	34.9	44.4
4 What Ought to be Done	14.2	16.5	29.2	19.7
3 Something for Others	3.4	5.0	8.9	4.7
2 Do the Right	18.0	21.3	17.5	19.1
1 Something Told to Do	16.8	8.0	3.2	11.4
0 No Response	3.8	2.6	4.3	0.7
Rating	8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
CHILDREN OF GOD	%	%	%	%
5 Human Beings	21.2	32.4	47.6	29.6
4 All Children	33.1	27.9	17.1	29.2
3 Believers in God	18.1	25.6	23.5	21.7
2 The Saved	5.1	5.3	3.8	4.9
1 Jews	2.7	5.0	4.2	3.6
0 No Response	19.8	3.9	3.8	11.1
Rating	8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
SCRIPTURE	%	%	%	%
5 The Whole Bible	10.5	17.4	35.2	17.0
4 Books of Bible	24.5	18.4	12.1	20.2
3 Verses from Bible	26.3	33.2	33.0	29.9
2 Sayings of Jesus	14.0	19.2	10.8	15.3
1 Tracts	0.8	1.6	0.6	1.0
0 No Response	23.9	10.2	8.3	16.6
Rating	8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
DIVINE	%	%	%	%
5 Like God	17.5	22.9	27.0	20.9
4 Sacred	10.5	22.1	32.0	18.2
3 Pure	27.5	34.0	25.4	29.5
2 Everlasting	11.0	10.0	7.3	10.0
1 Separate into Parts	8.5	3.1	0.6	5.2
0 No Response	25.0	7.9	7.7	16.2
Rating	8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
TEMPTATION	%	%	%	%
5 Desire to do Wrong	17.8	35.9	29.2	26.3
4 Do Evil	6.4	3.7	3.2	4.9
3 Swerve from Right	11.5	17.6	23.0	19.8
2 Urging of Satan	23.3	36.7	40.7	31.0
1 Have a Temper	10.5	3.4	1.7	6.5
0 No Response	30.5	2.7	2.2	11.5
Rating	8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
PACIFIST	%	%	%	%
5 Condemns War	5.1	7.2	6.4	6.0
4 Peace-maker	35.6	40.4	46.7	39.2
3 A Comforter	13.5	28.7	25.4	21.0
2 Religious Sect	5.1	8.0	6.0	6.3
1 Name of Ocean	5.0	0.6	0.0	2.6
0 No Response	35.7	15.1	15.3	24.9
Rating	8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
CONSCIENCE	%	%	%	%
5 Feeling of Right or Wrong	34.7	47.9	61.9	44.0
4 Voice of God	13.3	17.0	15.9	15.1
3 Your Soul	5.5	9.7	9.5	7.7
2 Your Thoughts	12.8	13.2	7.3	12.1
1 Your Heart	7.2	3.6	0.6	4.8
0 No Response	26.5	8.6	4.8	16.3

TABLE 13—(Continued)

Rating	*Concept*	*Percentage of each age group choosing each meaning.* 8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	WORSHIP	%	%	%	%
5	Praise God	39.3	43.4	46.4	41.9
4	Pray and Sing in Church	15.1	10.1	2.9	11.3
3	Idolize	3.1	4.5	5.7	3.9
2	Love Some One	6.3	3.6	4.5	5.0
1	Believe in God	31.6	34.4	35.9	33.4
0	No Response	4.6	4.0	4.6	4.5
Ratlng		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	SACRIFICE	%	%	%	%
5	Something Given to God	22.5	23.4	18.4	21.0
4	Give up Something	34.7	46.9	60.0	43.9
3	Jesus' Crucifixion	10.5	11.8	10.8	10.9
2	Give your Life	13.7	11.1	8.0	11.8
1	Burnt Offering	12.0	5.3	2.0	7.8
0	No Response	6.8	1.5	0.8	2.6
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	LORD'S SUPPER	%	%	%	%
5	Christ's Body and Blood	25.9	30.7	34.3	29.0
4	Supper before Crucifixion	31.4	38.0	45.6	36.4
3	Take Bread and Wine	14.0	7.6	9.2	10.9
2	Eat with God	12.2	6.1	6.4	9.1
1	Supper for Lord	14.5	5.8	2.9	9.3
0	No Response	2.0	12.8	1.6	5.3
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	CREED	%	%	%	%
5	Statement of Faith	26.9	49.1	67.6	41.6
4	Doctrine of Apostles	7.4	18.1	15.9	12.6
3	Part of Church Service	8.9	8.7	5.1	8.2
2	America's Creed	18.4	8.4	1.7	12.0
1	Selfishness	10.1	5.8	1.1	7.0
0	No Response	28.3	9.9	8.6	18.6
Ratlng		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	CHURCH	%	%	%	%
5	Place of Worship	14.0	26.1	39.3	22.4
4	Group of Believers	2.1	2.0	2.3	2.1
3	God's House	48.7	61.6	50.5	53.6
2	Holy Place	10.9	5.5	2.0	7.5
1	Sunday School	2.4	1.1	0.3	1.8
0	No Response	21.9	3.7	5.6	12.6
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	RELIGION	%	%	%	%
5	Belief in God	42.4	60.6	65.1	52.6
4	Be a Christian	16.8	13.5	8.6	14.2
3	Belief in Bible	12.9	15.0	12.4	13.6
2	Going to Church	3.1	2.0	0.6	2.4
1	Church Sect	3.5	7.5	7.6	5.6
0	No Response	21.3	1.4	5.7	11.6
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	MERCY	%	%	%	%
5	Forgiving Wrong	39.2	54.4	51.1	47.2
4	Be Sorry	13.3	5.5	2.6	8.7
3	Help Others	21.0	25.9	24.1	23.6
2	Be Easy on Someone	8.2	8.5	10.8	8.6
1	Not to Kill	13.3	5.0	2.3	8.3
0	No Response	5.0	0.7	9.1	3.6

TABLE 13—(Continued)

Rating	*Concept*	*Percentage of each age group choosing each meaning.* 8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	SIN	%	%	%	%
5	Disobeying God	58.1	45.4	42.5	50.9
4	Break Commandments	20.6	23.6	19.1	21.5
3	A Bad Thought	4.5	3.9	4.5	4.2
2	Against Christ's Will	11.7	20.3	27.0	17.3
1	Mistake	1.5	5.4	4.2	3.3
0	No Response	3.6	1.4	3.4	2.8
Rating		8-12 yrs.	13-15 yrs.	16-18 yrs.	Composite
	CHRIST	%	%	%	%
5	Jesus	26.6	27.9	23.5	26.6
4	Only Son of God	17.0	19.4	22.5	18.8
3	Our Savior	42.7	45.6	49.5	44.9
2	God	4.5	2.3	1.4	3.1
1	Good Man	2.5	2.6	0.3	2.2
0	No Response	6.7	2.2	2.8	4.4

Analysis of Responses of Children by Tables. In order to see the proportion of response on the various rated levels for all the concepts, the following tables are presented. In these tables will be found the percentages of the various types of response and the number of concepts having similar percentages of response in each rated level. Thus, there can be seen the percentage of "no response" and the number of concepts having that percentage. Also, the other levels of response are shown. The tables also show the amount of "highest" or "best" response and the number having the various percentages.

Table 14 shows the type of response chosen by the entire group of nineteen hundred and seventy-nine children of ages 8-18 years, and the percentage of such response made by various concepts. The measures of central tendency and variability for the entire group is given.

TABLE 14

SHOWING THE DISTRIBUTION OF THE PERCENTAGES OF THE VARIOUS TYPES OF RESPONSE OF THE ENTIRE GROUP OF NINETEEN HUNDRED AND SIXTY-ONE ON THE SIXTY CONCEPTS. NUMBER OF CONCEPTS IN EACH CLASSIFICATION ON EACH PERCENTAGE LEVEL.

Percentage of response	No Response	(1)Lowest	(2)Second Lowest	(3)Middle	(4)Second Highest	(5)Highest
95-100	0	0	0	0	0	0
90-94.9	0	0	0	0	0	1
85-89.9	0	0	0	0	0	0
80-84.9	0	0	0	0	0	0
75-79.9	0	0	0	0	0	0
70-74.9	0	0	0	0	1	1
65-69.9	0	0	0	0	0	3
60-64.9	0	0	0	0	2	2
55-59.9	0	0	0	0	1	0
50-54.9	0	0	0	2	4	3
45-49.9	0	0	0	0	2	5
40-44.9	0	0	0	1	0	6
35-39.9	0	0	0	2	9	7
30-34.9	0	1	1	0	2	5
25-29.9	0	2	3	2	4	5
20-24.9	2	3	4	7	5	4
15-19.9	7	0	9	7	9	7
10-14.9	12	6	12	10	10	8
5- 9.9	13	13	19	19	8	3
0- 4.9	26	35	12	10	3	0

TABLE 14 (Continued)

Measures	No Response	(1)Lowest	(2)Second Lowest
N	60	60	60
Mode	2.5	2.5	7.5
Range(actual)	0-24.9	0-34.9	0-34.9
P10-P90	2.0-17.3	0.9-20.0	2.5-22.5
P25-P75	3.0-12.5	2.2-9.0	5.8-16.1
Median	6.5	4.3	9.8

Meaures	(3)Middle	(4)Second Highest	(5)Highest
N	60	60	60
Mode	7.5	12.5	12.5
Range(actual)	0-59.9	0-74.9	5-94.9
P10-P90	3.0-27.5	3.8-52.5	11.9-62.5
P25-P75	6.5-19.3	12.0-37.2	18.0-45.0
Median	10.5	20.0	33.0

This table should be read in the same manner as Table 1 of this series.

Interpretation of Table 14. The composite table of the percentages of the various types of response of the entire group reveals the following facts: The percentage in no response and lowest response is very small, which reveals a desire to co-operate on the test and make some choice. About one-tenth of the group gave "2" and "3" responses to thirty or less of the concepts. One-fifth of the group gave "4" responses to one-half of the concepts or less, while one-third of the group underlined the highest rated response in the case of thirty or less concepts. The spread of the middle fifty per cent in each level was approximately the same, except in the "5" response, which showed greater variability.

Thus the group as a whole chose meanings scattered from lowest to highest, with a tendency toward the more meaningful ones. The average would indicate a fair understanding or less, with a considerable degree of confusion for the group in general. The group as a whole selected the meanings which were rated as less than superior, showing a vagueness and unfamiliarity with the concepts.

Percentage of "Superior Answer" Given Each Concept. Table 15 presents the entire list of sixty concepts used in the multiple choice test and the percentage in descending order of the superior meaning attached to each. The concepts are arranged by age groups and in parallel columns in order that a comparison of the concepts may be made.

TABLE 15.

SHOWING THE CONCEPTS AND THE PERCENTAGE OF SUPERIOR MEANING ATTACHED BY THE AGE GROUPS TO EACH CONCEPT.

8-12 years		13-15 years		16-18 years	
Christmas	89.0	Christmas	94.5	Christmas	96.5
Holy Spirit	69.9	Son of God	74.2	Christian	78.4
Easter	68.0	Holy Spirit	69.6	Salvation	77.1
Son of God	66.2	Easter	68.6	Son of God	76.1
Sin	58.1	Sunday	62.2	Disciple	75.6
Cross	57.9	Disciple	61.8	Holy Spirit	74.3
Christian	55.5	Religion	60.9	Easter	71.1
Disciple	54.5	Christian	60.6	Sunday School	70.5
Soul	46.3	Fatherhood of God	55.3	Creed	67.6
Sunday	46.3	Redemption	54.8	Conversion	67.3
Prayer	44.4	Salvation	54.8	Service	66.3
Duty	43.8	Service	54.6	Prayer	65.4
Religion	43.4	Mercy	54.4	Sunday	65.1
New Testament	41.9	Prayer	54.1	Religion	65.1
Confession	39.6	Conversion	52.5	Redemption	62.2
Conversion	39.5	Sunday School	49.5	Conscience	61.9
Worship	39.3	Creed	49.1	Fatherhood of God	61.3
Mercy	39.2	Soul	48.8	Missions	54.0
Fatherhood of God	38.1	Conscience	47.9	Mercy	51.1
Conscience	34.7	Missions	46.6	Children of God	47.6
Old Testament	31.8	Duty	46.6	Forgiveness	46.7
Brotherhood of Man	31.0	Sin	45.4	Worship	46.4
Forgiveness	30.7	Forgiveness	44.0	Soul	44.8
Service	30.7	Worship	43.4	Baptism	43.2
Baptism	30.3	New Testament	42.8	Righteousness	43.2
Will of God	29.7	Cross	41.2	Sin	42.5
Redemption	29.0	Confession	40.2	Immortality	42.5
Lord	27.4	Baptism	39.3	Repentance	41.0
Creed	26.9	Repentance	38.2	Church	39.3
Christ	26.6	Will of God	37.7	Will of God	37.9
Lord's Supper	25.9	Temptation	35.9	New Testament	37.9
Missions	25.9	Righteousness	35.2	Scripture	35.2
Repentance	25.4	Old Testament	33.1	Old Testament	35.2
Salvation	22.3	Immortality	33.0	Duty	34.9
Sacrifice	22.3	Children of God	32.4	Love	34.3
Immortality	22.2	Brotherhood of Man	31.1	Brotherhood of Man	30.8
Children of God	21.2	Lord's Supper	30.7	Lord	29.2
Righteousness	18.6	Christ	27.9	Temptation	29.2
Worldliness	18.0	Lord	27.0	Confession	27.9
Temptation	17.8	Church	26.1	Faith	27.3
Divine	17.5	Gospel	23.6	Divine	27.0
Sacred	17.4	Sacrifice	23.4	Preacher	26.7
Eternity	16.8	Divine	22.9	Gospel	25.7
Sunday School	16.3	Sacred	21.7	Eternity	23.8
Savior	14.4	Love	21.5	Christ	23.5
Sacrilege	14.4	Worldliness	20.5	Sacred	22.5
Church	14.0	Eternity	17.4	God	20.6
Love	13.4	Scripture	17.4	Spiritual	20.3

TABLE 15—(Continued)

SHOWING THE CONCEPTS AND THE PERCENTAGE OF SUPERIOR MEANING ATTACHED BY THE AGE GROUPS TO EACH CONCEPT.

8-12 years		13-15 years		16-18 years	
Bible	12.8	Faith	16.5	Sacrifice	18.4
Gospel	11.9	Bible	16.5	Lord's Prayer	17.5
Commandments	11.1	Commandments	16.4	Word of God	17.5
Scripture	10.5	Preacher	16.4	Savior	16.2
Word of God	8.7	Sacrilege	13.5	Bible	15.6
Faith	7.8	Spiritual	12.5	Worldliness	15.6
Spiritual	6.3	Word of God	11.5	Commandments	15.6
Lord's Prayer	6.3	Savior	10.1	Resurrection	11.1
Pacifist	5.1	God	10.0	Sacrilege	8.6
Resurrection	4.3	Lord's Prayer	8.1	Pacifist	6.4
Preacher	3.5	Resurrection	7.4		
God	1.1	Pacifist	7.2		

Interpretation of Table 15. In the multiple choice test one-fourth of the 8-12 age group attached superior meanings to thirty-two of the concepts, or slightly more than one-half of the total number of concepts. One-fourth of the 13-15 age group attached superior meanings to forty-one of the concepts, or slightly less than three-fourths of the number, while one-fourth of the 16-18 age group underscored the highest rated response on forty-three concepts, or only two more than the 13-15 age group.

The concepts having the highest percentage of superior response are the more common religious terms, such as religious days, places, and things. Some of the ethical and experienced terms such as "prayer," "worship," etc., appear in this grouping.

It is interesting to note the growth in superior response with the age groups to the terms "Church," "Sunday School." The concept "God" is given a very low percentage in this test for the reason that the meaning "Heavenly Father," which is most common in Christian thinking, is rated as "4" and does not appear here. The meaning "Supreme Being" was the one considered as "5," as that one which most nearly approached the definition in the *Dictionary of Religion and Ethics*.

A comparison of this table with the one in the chapter on the free-association method will be given in Chapter VI.

Percentages of Various Types of Responses by Twelve-year-old Children. In Table 16 are presented the list of the sixty concepts used in the multiple choice test and the percentage of the various types of response by the three hundred and two twelve-year old children. Immediately following this table will be found Table 17, which gives the total score distribution of this same group with the measures of central tendency and variability.

TABLE 16.

SHOWING THE SIXTY CONCEPTS AND THE PERCENTAGE OF THE VARIOUS RESPONSES MADE BY THREE HUNDRED AND TWO TWELVE-YEAR-OLD CHILDREN TO EACH CONCEPT.

	Rated Responses					
	5	4	3	2	1	0
	%	%	%	%	%	%
Christmas	95.4	1.0	0.7	0.7	0.0	2.2
Easter	73.3	9.2	0.7	0.0	2.3	14.5
Son of God	65.2	8.9	3.3	7.9	2.3	12.4
Holy Spirit	63.2	3.6	8.6	6.3	5.6	12.7
Christian	63.2	4.2	15.2	1.7	1.0	10.9
Disciple	54.8	18.8	2.0	5.3	2.6	16.5
Cross	54.5	27.4	2.3	2.3	1.0	12.5
Sunday	51.7	2.8	7.3	31.4	1.0	5.8
Sin	50.3	19.5	2.3	11.6	2.3	14.0
Salvation	50.3	14.5	2.3	18.2	2.3	12.4
Soul	49.7	28.7	2.8	5.6	2.0	11.2
Prayer	49.0	33.0	2.8	1.0	2.0	12.2
Religion	46.5	11.9	12.0	1.3	3.6	24.8
Duty	45.2	16.8	1.0	17.2	7.9	11.9
Fatherhood of God	45.2	14.5	12.2	11.2	4.3	12.6
Mercy	42.2	10.9	17.5	11.2	7.6	10.6
Conscience	39.6	11.6	4.6	14.2	3.3	27.6
Conversion	38.7	5.3	28.1	0.0	12.2	15.7
Service	38.7	14.9	6.9	22.8	5.0	12.1
Creed	37.3	11.9	6.0	10.2	6.0	28.6
Forgiveness	37.0	31.7	11.2	0.3	5.6	14.6
Worship	36.3	11.9	1.7	6.9	34.0	9.2
Redemption	35.0	15.2	14.5	9.6	2.0	23.7
Confession	33.3	13.9	7.3	4.3	19.8	21.4
New Testament	31.7	42.6	5.6	5.6	4.6	9.9
Missions	31.0	18.8	6.6	26.7	6.3	10.6
Temptation	30.7	5.0	8.9	30.0	4.0	21.4
Brotherhood of Man	30.4	21.1	17.2	17.2	0.3	13.8
Baptism	30.0	9.9	14.9	5.0	20.5	19.7
Will of God	29.0	21.1	10.6	14.6	0.0	24.8
Sunday School	28.7	4.6	37.3	26.7	2.0	0.7
Repentance	27.7	13.2	3.3	19.1	24.8	11.9
Old Testament	27.4	10.2	19.8	24.4	6.6	11.6
Righteousness	23.8	27.1	13.2	14.9	2.0	19.0
Lord's Supper	23.1	39.6	12.9	7.3	5.0	12.1
Christ	22.8	14.5	46.0	2.3	0.3	14.1
Children of God	22.8	29.7	12.2	4.3	4.6	26.4
Immortality	21.5	17.5	20.8	3.6	8.3	28.3
Sacrifice	21.5	38.3	11.9	9.6	5.6	13.1
Lord	20.5	16.5	10.6	31.0	6.0	15.4
Worldliness	19.5	15.5	13.9	9.2	14.2	27.7
Sacred	18.2	47.0	5.6	6.9	5.0	17.3
Church	15.8	1.8	50.5	8.9	1.0	22.1
Love	15.5	39.9	11.9	10.2	7.9	14.6
Divine	15.2	15.8	29.7	9.9	5.3	24.1
Commandments	14.9	28.7	6.3	11.9	20.8	17.4
Gospel	14.2	40.9	9.6	11.9	1.3	22.1
Eternity	13.9	7.3	49.2	0.0	8.9	22.1

TABLE 16—(Continued)

SHOWING THE SIXTY CONCEPTS AND THE PERCENTAGE OF THE VARIOUS RESPONSES MADE BY THREE HUNDRED AND TWO TWELVE-YEAR-OLD CHILDREN TO EACH CONCEPT.

	Rated Responses					
	5	4	3	2	1	0
	%	%	%	%	%	%
Bible	13.5	62.9	6.3	12.9	0.3	4.1
Sacrilege	12.5	17.5	34.3	3.6	2.6	29.5
Word of God	11.6	41.6	5.0	14.2	7.3	20.3
Scripture	10.9	20.5	30.0	15.0	0.0	23.1
Spiritual	10.2	43.2	10.6	19.5	2.5	13.7
Savior	8.9	51.7	10.8	11.2	3.3	14.3
Faith	3.6	65.2	8.9	2.0	4.0	11.3
Preacher	5.6	26.1	35.3	21.8	1.7	9.4
Lord's Prayer	5.3	50.8	2.3	13.5	15.5	12.6
Pacifist	5.0	33.3	21.1	5.3	1.3	34.0
God	2.3	75.2	8.9	1.7	1.0	10.9
Resurrection	2.3	70.9	4.6	6.3	3.3	12.6

TABLE 17

SHOWING THE TOTAL SCORE DISTRIBUTION OF THREE HUNDRED AND TWO TWELVE-YEAR-OLD CHILDREN ON THE MULTIPLE CHOICE TEST

Score Level	Frequency	Percentage on Each Level	Measures	
280-300	0	0.0		
260-279	1	0.3		
240-259	28	9.3	N	302
220-239	99	32.8	Mode	215 & 225
200-219	99	32.8	Range (actual)	80-280
180-199	45	14.9	Median	215.4
160-179	16	5.3	Mean	196.3
140-159	2	0.7		
120-139	6	1.9		
100-119	3	1.0		
60-79	0	0.0		
40-59	0	0.0		
20-39	0	0.0		
0-19	0	0.0		

This table should be read as follows: On the score level containing the scores between 0-19, no pupil's score is found, which is 0.0 percent of the scores of the group. Each of the other score levels should be read in the same manner.

Interpretation of Percentage Table of Responses of Twelve-Year-Old Children. Table 16 presents the total response on the various rated levels of the three hundred and two twelve-year-old children who took the multiple choice test. This will be found useful in comparing the other groups, using the twelve-year-old as a norm. Also, in giving the test in the future, this table should prove of value in judging the person tested.

Practically the same percentage of superior response exists for the twelve-year-old group as for the 13-15 age group.

The table showing distribution of the total scores made on the multiple choice test by the three hundred and two twelve-year-old children should prove of value in showing the spread of this representative group on the various score levels and also in showing the average and typical scores made by this age. In judging other children on future tests, the comparison should be made with these tables.

Chapter Summary and Conclusions. The following facts seem to stand out from the data presented:

1. The children of all age groups responded by underlining some one possible meaning almost one hundred per cent on the multiple choice test, which indicates a willingness to co-operate on the test. The percentage of "no response" decreased with age. This may be interpreted to mean that the meanings chosen were representative of the thinkjing of the children.

2. The amount of response farthest from the accepted meaning was small, which would indicate that no large amount of definitely wrong ideas has been formed, as this response in the main included the wrong ideas.

3. The increased percentage of "wrong idea" or "confused response," as represented by the "2" and "3" rated responses, would indicate a considerable amount of confused ideas in the minds of a large number of children regarding the concepts.

4. The "fair understanding" and "superior" response percentage shows that the concepts as a whole are not well understood by the age groups. These data may be interpreted to indicate only a fair understanding of the concepts.

5. There is considerable development in clearness of meaning between the 8-12 and the 16-18 age groups, but very little between the 13-15 and the 16-18 age groups. One may infer from the lack of increase in the higher-rated responses by the 16-18 age group that there is very little development in meaningfulness of these concepts after the 13-15 age groups.

6. More of clear understanding seems to be had of the common concepts of religious places, days, persons, and things. The concepts indicating ethical and experiential understanding are not responded to with such clear understanding.

CHAPTER V

FACTORS INFLUENCING THE NATURE AND DEVELOPMENT OF RELIGIOUS CONCEPTS

While it is manifestly impossible to determine all the conditioning factors in the experience of the child which influence the understanding of the concepts, yet it is important to discover the extent of the influence of as many factors as possible. An effort was made on the first page of the multiple choice test to secure data regarding some of these conditioning factors. Each of these factors will be discussed under separate headings in this chapter. Brief studies in the relation of the following will be presented:

1. Chronological age and understanding of concepts.
2. Mental age and understanding of concepts.
3. School grade and understanding of concepts.
4. Grade in the church school and understantding of concepts.
5. Church school attendance and understanding of concepts.
6. Teacher scores compared with pupil scores.
7. Departmental classification and understanding of concepts.
8. Church membership and understanding of concepts.
9. Certain religious influences and understanding of concepts.

These facts are not presented as conclusive evidence of the degrees or kinds of conditioning factors, but only as suggestive influences. The tables and correlations should point out the degree of possible influences for this group of these factors.

In order that the group as a whole may be seen, the distribution of the total scores of the entire group of nineteen hundred and seventy-nine children is given on the following page. The distribution will be the basis of the correlation and tables reported later in this chapter. The distribution of the total scores as made by the children will later be compared with the total score distribution of a group of seventy-two teachers in the various church schools. These teachers are teaching in the church schools of Southern California and are a part of the group of teachers having charge of the children reported in this study.

TABLE 18
SHOWING THE DISTRIBUTION OF THE TOTAL SCORES ON THE MULTIPLE CHOICE TEST OF NINETEEN HUNDRED AND SEVENTY-NINE CHILDREN.

Score Level	Frequency	Percentage on each level	Measures	
290-300	0	0.0		
280-289	0	0.0		
270-279	0	0.0		
260-269	16	0.9		
250-259	84	4.2		
240-249	213	10.8		
230-239	336	17.0	N	1979
220-229	331	16.7		
210-219	234	11.8	Mode	235
200-209	211	10.7		
190-109	135	6.8	Median	220.7
180-189	107	5.4		
170-179	60	3.0	Range (actual)	40-270
160-169	51	2.6		
150-159	32	1.6	P10-P90	159.7-245.4
140-149	47	2.4		
130-139	32	1.6	P25-P75	195.8-234.6
120-129	23	1.2		
110-119	15	0.8	Mean	202.2
100-109	12	0.6		
90-99	13	0.7		
80-89	5	0.2		
70-79	12	0.6		
60-69	2	0.1		
50-59	4	0.2		
40-49	2	0.1		

This table should be read as follows: On the score level containing the scores between 40-49 the scores of two children are found, which is 0.1 percent of the scores. Each of the other frequencies should be interpreted in the same manner.

Interpretation of Table 18. In interpreting the data presented in Table 18, it should be noted that the scores of the groups tend to cluster about the score levels 180-250. The middle fifty per cent of the group is found between 195.8 and 234.6. This condition would seem at first glance to indicate a high score on the test revealing a good understanding of the concepts, but when the median score, for example, is divided by the number of concepts

in the test, the median type of response would be only 3.7 rated response, or indicating an understanding of the concept somewhere between "confused" and "fair understanding." If the average, or 202.2, were divided by the number of concepts in the test, the average type of response would b only 3.4 or even a lower rated response than indicated by the median. This fact of unfamiliarity with the concepts was shown in the percentage tables presented in the two preceding chapters.

Chronological Age and Understanding of the Concepts. In order that the development in meaning, if any, of the concept for the children with maturation might be shown, the Table No. 19 is given. Only the score levels on which some score was actually made are given. The number of children on each score level for each year from 8-18 is shown. The measures of central tendency and variability are also presented.

TABLE 19
SHOWING THE DISTRIBUTION OF THE TOTAL SCORES BY CHRONOLOGICAL AGE OF THE NINETEEN HUNDRED AND SEVENTY NINE CHILDREN WHO TOOK THE MULTIPLE-CHOICE TEST

	Frequency					
Score Levels	8yrs.	9yrs.	10yrs.	11yrs.	12yrs.	13yrs.
260-279	0	0	0	0	1	2
240-259	0	3	8	14	28	35
220-239	1	21	34	57	99	119
200-219	5	36	62	51	99	65
180-199	13	41	41	37	45	19
160-179	7	27	14	15	16	11
140-159	5	14	16	13	2	10
120-139	1	20	10	7	6	2
100-119	2	10	7	1	3	1
80-99	2	8	4	2	3	0
60-79	2	4	4	1	0	0
40-59	2	2	2	0	0	0
Measures						
N	40	186	203	198	302	263
Mode	185	185	205	225	205-225	225
Median	177.2	184.0	207.0	209.0	215.4	224.0
Range	40-249	40-259	40-259	60-259	80-279	100-279
P10-P90	80-208	109.2 225.1	126.2 232.8	153.6 238.0	160.1 239.8	182.4 246.2
P25-P75	144- 193.8	143.6- 207.4	151.2- 217.2	185.6- 227.6	200- 230.8	207- 235.2

TABLE 19 (Continued)
SHOWING THE DISTRIBUTION OF THE TOTAL SCORES BY CHRONOLOGICAL AGE OF THE NINETEEN HUNDRED AND SEVENTY NINE CHILDREN WHO TOOK THE MULTIPLE-CHOICE TEST

	Frequency				
Score Levels	14yrs.	15yrs.	16yrs.	17yrs.	18yrs.
260-279	2	2	3	5	2
240-259	61	44	51	38	23
220-239	118	75	66	46	25
200-219	55	35	21	10	11
180-199	22	9	6	2	1
160-179	12	2	3	2	2
140-159	7	6	2	1	1
120-139	4	2	1	1	1
100-119	2	2	0	0	0
80-99	1	2	0	0	0
60-79	1	1	0	0	0
40-59	0	0	0	0	0
Measures					
N	285	180	153	103	66
Mode	225	225	225	225	225
Median	229.9	228.2	233.2	235.4	233.6
Range	60-279	60-279	120-279	120-279	120-279
P10-P90	180.1 251.4	186.6 252.8	203.2 255.2	208.6 257.2	203-256
P25-P75	208.2- 238.2	212- 240.4	221.6 246	224.2 249	220.4- 239.6

This table should be read as follows: On the score level 40-59 the scores of 2 children of 8 years of age appear. The entries on the other score levels in the different age divisions should be read in the same manner.

Interpretation of Chronological Age Table. A small growth in the understanding of the meaning of the individual concepts with maturation was shown in the preceding chapters, where percentages for the several types of responses were compared. Small growth is also revealed in the table just given, which gives the distribution of the total scores made on the multiple choices by the children of differing chronological age. A small but definite increase in median score by the older age groups is shown by the table. A comparison of the middle fifty per cent of each age group

reveals a variability in the scores of the younger children with a clustering about the higher score levels in the 16-17-18 age groups, which might indicate a slightly better understanding of the meaning of the concepts by the older children.

Further evidence of the fact that there is very little increase in understanding of the meaning of the concepts with maturation is given by the coefficient of correlation between the chronological ages of the nineteen hundred and seventy-nine children and the total scores made by them on the multiple choice test. The correlation between these factors by the product moment method was .23 with a probable error of .01, which, although positive, is low, and indicates very little relationship between chronological age and score made on the test. A slight relationship is indicated by the correlation but not enough to be of significance.

Mental Age and Understanding of Concepts. The Terman group intelligence test was given to ninety-one University High School students at the University of Southern California. This group on the same day took the religious concept test in its multiple choice form as reported in Chapter V of this study. It is realized by the wrtier that this group is small when compared with the total number of children who are reported on in this study; yet the group is sufficiently large to indicate a definite trend. The chronological ages of the group ranged from eleven to nineteen. Using the mental age records of this group as obtained from the Terman test and the total scores made by each child on the multiple choice test, the coefficient of correlation between these factors was computed. The coefficient, which was .29 with a probable error of .07, indicates only a slight relationship between the intelligence of the group and their understanding of the meaning of the religious concepts. This condition may be due to many reasons, perhaps chiefly lack of religious education and corresponding lack of religious interest.

Pedagogical Age and Understanding of Concepts. The correlation between grades in the public school and the score in the test for the nineteen hundred and seventy-nine children is higher than that between age and the test scores. The correlation was .45, with a probable error of .012, which would indicate a rather

high relationship between school grade and scores made in the concept test. The reason for this close relationship may be found in certain factors essential to both. School grade is based upon intelligence, or achievement in work assigned in reading, which in turn requires word meaning. The same abilities should carry over into the realm of religious thinking.

Church School Attendance and Understanding of Concepts. The children who took the multiple choice test were asked to underscore the number of years they had attended the church school. A considerable number failed to do so, and many of the responses could be seen to be only guesses from the fact that the year underlined was more than the chronological age given by the child. These cases were eliminated. Fourteen hundred and sixty-eight cases were used. The resulting correlation of .09, with a probable error of .162, between the total score made by the child and church school attendance of the child, may only indicate inability of the student to remember the length of his period in the church school, but also may show that the length of time in the church schools affects very little the understanding of the concepts. If the answers of the group may be taken as fairly reliable, it would seem that increased meaningfulness of religious concepts is not affected materially by church school attendance. The writer sought to secure a group of non-church school attendants to compare with the above group, but the group secured was too small to provide a reliable basis for comparison.

Comparison of Total Scores made by Teachers and Pupils on Multiple Choice Test. Table 20 shows the distribution of the total scores made by seventy-one teachers in the church schools from which came the pupils reported in this study. The measures of central tendency and variability for this group are given. Following the table is an interpretation of the data and a comparison made by teachers and pupil scores.

TABLE 20

SHOWING THE DISTRIBUTION OF THE TOTAL SCORES MADE BY SEVENTY-ONE CHURCH SCHOOL TEACHERS ON THE MULTIPLE CHOICE FORM OF TEST

Score Level	Frequency	Percentage on Each Level	Measures	
290-300	0	0.0		
280-289	0	0.0		
270-279	0	0.0	N	71
260-269	9	12.7	Mode	245
250-259	10	14.1	Median	242.5
240-249	22	31.0	Range	140-269
230-239	16	22.5	P10-P90	203.7-262
220-229	4	5.6	P25-P75	232.5-251
210-219	1	1.4		
200-209	3	4.2		
190-199	4	5.6		
180-189	0	0.0		
170-179	1	1.4		
160-169	0	0.0		
150-159	0	0.0		
140-149	1	1.4		

This table should be read as follows: On the score level 140-49 the scores of one teacher is found. The other levels should be read in the same manner.

Interpretation of Table 20. A comparison of the total scores of the children and of the teachers shows that the teachers as a whole did better on the test than the children. The median score of the teachers is 22 points higher than the median score of the children. The spread of the middle fifty per cent reveals a clustering about the 240 point on the part of the teacher scores, while the middle fifty per cent of the children scores range from 195.8 to 234.6. The distribution of the teacher scores would reveal a good understanding of the concepts, while with the children the concepts are vague and of inadequate meaningfulness.

Departmental Classification and Understanding of Concepts. In Table 21 is presented the distribution of the total scores by departmental classification of eighteen hundred and ninety-four of the children who took the multiple choice test. This table with the various measures of central tendency and variability is given in order that the growth, if any, of understanding of the concepts by the children may be traced in the length of time in the church school.

TABLE 21

SHOWING THE DISTRIBUTION OF THE TOTAL SCORES OF EIGHTEEN HUNDRED AND NINETY-FOUR CHILDREN BY DEPARTMENTS IN THE CHURCH SCHOOL

Score Levels	Junior	Junior High	Senior High
260-270	0	4	12
250-259	4	24	43
240-249	12	96	96
230-239	56	142	130
220-229	65	174	72
210-219	87	101	38
200-209	102	78	22
190-199	74	51	8
180-189	59	27	10
170-179	34	19	4
160-169	34	11	5
150-159	19	6	6
140-149	25	14	5
130-139	22	3	4
120-129	18	3	2
110-119	11	3	1
100-109	8	4	1
90-99	11	2	0
80-89	7	0	1
70-79	9	2	1
60-69	2	0	
50-59	5	0	
40-49	2	1	
	Measures		
N	666	765	463
Mode	205	225	235
Range	40-259	50-270	70-270
Median	198.7	204.6	233.9
P10-P90	123.2-231.0	183.2-239.4	197.9-252
P25-P75	177.5-216.6	195.9-235.2	221.1-243.7

This table should be read as follows: On the score level 40-49 are found the scores of two children who are in the Junior Department of the church school and of one child of the Junior High Department. The entries for each of the other score levels should be read in the same manner.

Interpretation of Table 21. The distribution of total scores by the church school departments reveals a definite growth in meaning when the groups are thus considered. The median of the Senior High group is 35.2 higher than that of the Junior group. The spread of the Senior High group is considerably less than

that of the Junior group. These data give a picture different from the correlation of church school attendance and score, and perhaps a more reliable one. The underscoring of the "years in the church school" by the children would in many cases be only a guess, but in the departmental classification we have a definite standard. The indication is that the meaning of the concepts increases with the stay in the church school.

Church Membership and Understanding of Concepts. It is customary in most of the evangelical denominations to give those children who wish to become church members courses of study in church history and doctrine. This course is of varying length and value, yet such a course would emphasize such concepts as God, Christ, Church, Salvation, and the like. This emphasis and church interest should have significance for the meaning of a concept table. The following table reveals the importance of this emphasis:

TABLE 22

SHOWING A COMPARISON OF THE TOTAL SCORES MADE ON THE MULTIPLE CHOICE TEST BY ELEVFN HUNDRED CHILDREN WHO ARE CHURCH MEMBERS AND SIX HUNDRED AND EIGHT WHO ARE NOT.

Score Level	Church Membership			
	Yes		No	
	Frequency	Percentage on Each Level	Frequrncy	Percentage on Each Level
270	71	6.5	22	3.6
250	378	34.3	135	22.1
230	299	27.2	197	32.4
210	177	16.1	113	18.6
190	69	6.3	56	9.2
170	34	3.1	36	5.9
150	38	3.5	20	3.3
130	17	1.6	15	2.5
110	11	1.0	9	1.5
90	5	0.5	5	0.8
70	1	0.1	0	0.0
50				
	Measures			
N	1100		608	
Mode	240		220	
Median	223.2		215.0	
Range	50-270		70-270	
P10-P90	171.1-248.0		156.6-244.2	
P25-P75	201.2-235.2		191.9-230.8	

Interpretation of Table 22. A study of Table 22 reveals nearly twice as many of the children to be church members than are non-members. The comparison of medal scores shows a higher score for the church members than for the non-church members. The church member group has a median score 8.2 points above that of the non-member group, which is not a significant difference. The range is practically the same. The middle eighty per cent of the groups are above the equal in variability. The middle fifty per cent of the church member group reveals a tendency toward higher scores than does the other. From these data one would not be justified in concluding that church member- various conditioning factors in relation to the understanding of religious concepts.

Family Worship and Understanding of Concepts. In the following table, presenting the comparison of scores made by the groups claiming family worship in the home and those answering "No" to that question, the difference between the two groups is as definite as in the table presented above. Fourteen hundred and ninety-three children were considered in this table. The interpretation of the data presented in tabular form follows immediately.

TABLE 23

SHOWING A COMPARISON OF THE TOTAL SCORE DISTRIBUTIONS OF THE SEVEN HUNDRED AND EIGHTY-TWO CHILDREN REPORTING FAMILY WORSHIP AND THE SEVEN HUNDRED AND ELEVEN CLAIMING NO FAMILY WORSHIP.

Score Level	Family Worship			
	Yes		No	
	Frequency	Percentage on Each Level	Frequency	Percentage on Each Level
270-290	0	0.0	0	0.0
250-269	38	4.9	51	7.2
230-249	239	30.7	212	29.8
210-229	229	29.3	202	28.4
190-209	111	14.2	112	15.8
170-189	67	8.6	52	7.3
150-169	36	4.6	25	3.5
130-149	31	3.9	26	3.7
110-129	16	2.1	13	1.8
90-109	9	1.1	8	1.1
70-89	5	0.6	9	1.3
50-69	1	0.1	1	0.1
	Measures			
N	782		711	
Mode	240.0		240.0	
Median	220.0		216.0	
Range	50-270		50-270	
P10-P90	159.0-246.6		161.2-248.2	
P25-P75	193.6-236.8		197.8-236.2	

Interpretation of Table 23. A comparison of the measures of central tendency and variability show very little difference in the scores made by the two groups. The median of the "family worship" group is only slightly higher than the other, with the other measures equal. This might be taken to mean that family worship has no influence on meaningfulness of concepts. "Family worship" was explained to the groups as meaning Bible reading and prayer in the home. It is realized that the answers of the children may be with differing concepts in mind of the nature of such worship, and that therefore answers may be given which differ widely. Yet it would be justifiable to conclude that family worship alone is not a significant factor in producing an understanding of religious concepts.

Certain Religious Influences and Understanding of Concepts. Table 24 shows a comparison of four groups of children as to total scores made on the multiple choice test. Those children having both church membership and family worship influence are compared with those having neither of these influences and also with those children having one or the other of these influences.

TABLE 24

SHOWING A COMPARISON OF THE TOTAL SCORE DISTRIBUTIONS OF GROUPS SUBJECTED TO CERTAIN RELIGIUS INFLUENCE AND TO NONE, AND ALSO GROUPS WITH PARTICULAR INFLUENCES.

Score Level	Religious Influence			
	C.M.&F.W. Yes Yes	C.M.&F.W. No No	C.M.&F.W. Yes No	C.M.&F.W. No Yes
270-300	0	0	0	0
250-269	29	11	35	7
230-249	164	58	49	58
210-229	147	88	100	73
190-209	87	45	55	39
170-189	34	28	21	25
150-169	20	11	11	15
130-149	19	7	15	11
110-129	9	8	4	7
90-109	6	3	5	3
70-89	1	5	4	00
50-69	0	0	1	0
	Measures			
N	516	265	300	238
Mode	240	220	220	220
Median	219.2	215.8	216.8	215.2
Range	70-270	70-270	50-270	90-270
P10-P90	166.6-247.2	156.4-244.6	151.8-252.8	153.8-244.0
P25-P75	198.6-238.0	192.0-231.0	195.0-233.6	188.8-231.8

This table should be read as follows: C.M. stands for church membership, F. W. for family worship. On the score level 50-69 no children having both C.M. and F.W. are found, no children are found in the "no inflnence" group, one child in the C.M., but none in the F.W. group and none in "No C.M. and No F.W." group. The entries on other levels should be interpreted in the same manner.

Interpretation of Table 24. The seeming lack of influence of church membership or family worship upon the understanding of religious concepts by the children is further emphasized by the data presented in the above table, showing the influence of both church membership and family worship as compared with neither of these factors. The group having both has a median score only slightly higher than the group claiming neither of these influences. The spread of the middle fifty per cent is practically the same. The data would indicate a slight influence on the meaning of concepts by the factors mentioned. In the relationship of church membership without family worship and family worship without church membership, practically no difference is shown.

Chapter Summary and Conclusions. The tables which were presented in this chapter and the correlations reported show the various conditioning factors in reation to the understanding of religious concepts by the children who took the multiple choice test.

The following conclusions are drawn by the author from the data presented in this chapter:

1. Age is a conditioning factor, although growth in understanding of the religious concepts by the children seems to increase only slightly with maturation.

2. School grade is a potent factor, indicating the general development of the individual, caused by a large range of experiences or associations. The religious thinking for this group who are regular church school attendants develops along with the other phases of general development of the children, and not primarily from definite teaching as an isolated factor.

3. The departmental classification indicates a growth in meaningfulness as the child advances in the church school, although the correlation of length of time in church school and score made in the test would indicate no particular relationship. This

departmental classification is perhaps the most reliable for the reasons given in the discussion under Table 21, and is more in harmony with the findings by other tables, namely, that there is a slight growth in meaning with maturation.

4. There seems to be a slight but not significant relationship between church membership and the understanding of religious concepts by the children. This may indicate a lack of definite religious training and religious interest.

5. Family worship seems to have little or no influence on the formation of meaningful concepts. The combined influence of both church membership and family worship would indicate a small but definite influence of these factors, if any.

CHAPTER VI

SUMMARY AND CONCLUSIONS

Resume. The conclusions given in the previous chapters and summarized below are based on the findings of a free-association test given to three hundred and forty-six children of ages 8-18 and a multiple choice test given to nineteen hundred and seventy-nine children of the same age groups. The free-association test contained one hundred representative religious concepts, while the multiple choice test contained the sixty of those hundred deemed most important by competent judges. The tests were given in a large number of church schools of various denominations in Southern California. The findings have been presented in the preceding chapters.

Comparison of Findings by the Two Methods of Testing

1. a. There is, with the free-association method, a high percentage of "no response" records for the concepts on the part of the 8-12 age groups, with a decided lessening of "no response" records in the older groups.

   b. Very few "no response" records are recorded for the multiple choice test, although the greatest percentage of "no response" is with the 8-12 age group, as might be expected.

   c. The frequent "no response" record with the free-association method is indicative of lack of familiarity with the concepts, but may also be due to inability of the child to express himself. The great decrease in "no response" record through the multiple choice test may indicate that either the child guessed at the meanings, or found meanings there which seemed to him to most nearly explain what the concept meant. The fact that the 8-12 group underlined many meanings in the multiple-choice test which were farthest removed from the accepted meaning would indicate that the findings of the free-association test are reliable; namely, the younger child is unfamiliar with the concepts. It may be reasonably assumed that the findings of both tests would substantiate the fact that for a large percenage of the group many of the concepts are meaningless.

2. a. In the free-association test the percentage of "wrong idea" responses was low, and about equal for all age groups.

b. The percentage of response farthest from the accepted meaning in the multiple choice test was small and about equal to the "wrong idea" response on the free-association test.

c. The above summaries would indicate that in both tests the amount of lowest rated response was very small, which might be interpreted to mean that the group has formed very few definitely wrong associations regarding the concepts, but that there is rather a vagueness and meaninglessness on the part of the group toward most of the concepts.

3. a. The "confused" response record was also a small percentage of the total response for the group by the free-association method.

b. In the multiple choice test the percentage of "confused answers" record is slightly higher than the percentage of such answers by the free-association method, but not significantly higher.

c. The fact of the large percentage of "no response" record in the first test may indicate confusion, and, therefore, inability to express the meaning. The second test reveals confusion regarding the meaning of the concepts judged by the meanings selected by the children. The confusion is shown particularly in the use of such concepts as God. Christ, Holy Spirit.

4. a. The largest percentage of any form of response by the free-association method is found in the "fair understanding" division, especially among the older age groups. The percentage of such responses among the 8-12 age groups is less than one-fourth of the total number of responses made by this age group.

b. In the multiple choice test a "fair understanding" was shown by a considerable percentage of the group, indicating for the older age groups, particularly the 16-18 age group, a "fair understanding" of the concepts.

c. About the same amount of "fair understanding" response is revealed by both tests. The percentage, when the entire group is considered, is one-fifth or less of the total number response. The percentage increases very slightly with age.

5. a. The percentage of "superior response" by the free-association method indicates very little of meaning which might be rated as equal to the dictionary definition. This

fact would further emphasize the condition of vagueness, confusion and small percentage of "fair understanding" as revealed throughout by the test.

b. The multiple choice test reveals a larger clear meaning response than does the other, especially in the older age groups. The median percentage of clear response is more than twice that of the free-associtaion test. There is very little growth in meaning beyond the 13-15 age group as revealed by both tests.

c. Both tests reveal the lack of clearness of understanding of the religious concepts on the part of the children taking the tests. This condition is particularly true in the young age groups, and points to a need of teaching of the meanings of the religious concepts used in present day thinking.

6. Clear or accepted meanings are attached in many cases to the common religious concepts of special days, places, persons and things. These more concrete concepts, such as "Christmas," "Easter," and so on, are better understood. The ethical and experiential concepts such as "conscience," "salvation," "redemption," and the like, seem to be the least understood. This fact is revealed by both forms of the test. The multiple choice test secured more of clear response to the ethical and experiential concepts than did the free-association test.

7. The findings by both methods of testing reveal a slight development in meaningfulness of the concepts with maturation. The greatest development seems to be between 8 and 15 years of age. There is but little evidence of growth after fifteen years of age.

8. Church school attendance seems to have no significant influence on the development of meaning. Those children who claim a short stay in the church school did as well as those of a longer period. On the other hand, the children of the upper departments of the church school showed a better understanding than those in the lower departments.

9. Church membership is perhaps the most significant single inuencing factor, while family worship seems to have but small effect. Yet church membership seems to have very little inuence on the understanding of religious concepts.

Summary of Compared Findings by the Two Tests

Both tests reveal practically the same findings, namely:

1. That the child has formed very few definitely wrong ideas regarding the various religious concepts used in the tests.

2. That vagueness and confusion are the outstanding characteristics of the responses to the concepts.
3. That clearer meaning is found among the commoner concepts of religious days, places and persons.
4. That there is a slight development in understanding of the concept with the maturing of the child. The greatest development comes between 8 and 15 years of age.

Religious Educational Implications

1. The children as a whole are not well acquainted with the concepts used in the church school curriculum and in the representative religious magazines and books.
2. The lack of clear meaning reveals an unfamiliarity with the experience lying back of the concept. The concept "Christian," illustrates the lack of content experience connected with the terms.
3. There is slight development of meaningfulness with maturation, revealing the lack of continued experience with the phases of religion summed up by these general terms.
4. If one's thinking is no better than his concepts, the religious thinking of the children studied is inadequate, vague, and confused.
5. The unfamiliarity of the children with the religious concepts representative of current religious thinking would argue for the need of better teaching in the church school and more time for the experiences which underlie these concepts. The findings would seem to indicate that the present Sunday program is inadequate for religious development.

Suggestions for Further Study

1. Comparative study of the concept meanings of the children given in this study with the meanings associated with the concepts in the church school curriculum.
2. Comparative study of the concept meanings given by the children and the meanings developed in the hymns used in the church school worship.
3. Comparative study of the concept meanings given by children in this study with the meaning which might be given by their parents, and by their grandparents, to discover the change in concept content with the changing thought of the times.

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Thesis - University of Southern California.
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